NHS Care Records Service

12169 SUS R9

SUS - Data Access Service User Guide

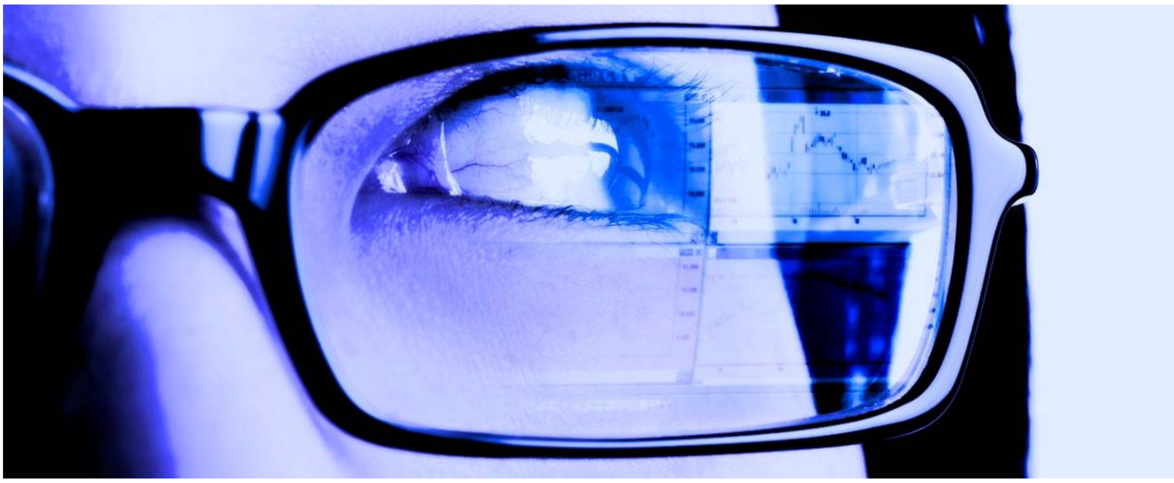

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Table of Contents

1 Document Purpose

The purpose of this user guide is to provide functional step by step instructions supplying the necessary guidance to perform all analysis user functions efficiently and effectively within the SUS Toolkit.

The SUS toolkit is made up of various sections called:

- NetPortal
- NetInform
- NetQuery
- NetPublish
- NetAlert

This user guide will refer to the combination of these elements as the “SUS Toolkit”.

1.1 Disclaimer

All data and names used within this training material are for illustrative purposes only and bear no relationship to actual persons or organisations nor do they constitute correct or complete statements of fact, any and all similarities being purely coincidental.

This material was created using pre-release software as a result minor differences may exist between the screen images used and those present in the released version.

BT is not responsible for the link to, nor the content or validity of internet sites referenced in this material.

2 Computer Build (Warranted Environments)

Warning: You must ensure that your computer is set up/built to one of the specific warranted environments as stated below. A warranted environment is a client environment that supports BT software.

In reality what this means is if your PC meets this minimum standard the software/service supplied by BT will function fully and correctly.

Warranted environments meet minimum standards with respect to the following key components.

- Operating systems
- Browsers
- Java virtual machines (JVMs)

In order to run the software to support the SUS release your PC must meet the minimum specification, which is:

- Operating systems: **Windows XP**
- Browsers: **Internet Explorer v6.0**
- **Java Runtime Environment (JRE) v1.5**

Note: There are two types of impacted sub systems:

- Sub systems that include client side software components, for example EDT
- Sub systems that expose browser based user interfaces, for example BOE (SUS as Business Objects) and Cassius (SUS as Data Access Service, Ardentia interface)

It is the responsibility of your local IT department to ensure your PC meets the minimum standard. If you have any queries or questions regarding warranted environments please refer to your local IT department.

2.1 Baseline set of warranted environments information

The following information specifies the baseline set of warranted environments for the SUS release to assist you or your local IT department to ensure your PC meets the minimum standard.

2.1.1 Workstation Client environments for Cassius

The following table specifies the baseline set of workstation client environments that SUS shall support for Cassius.

Ref ID	Operating System	Browser	JVM	Status
DC1.13	Windows 2000 SP4	MS Internet Explorer 6.0 SP1	Sun JRE 5.0	Existing
DC1.14	Windows XP Pro SP2 (32 bit)	MS Internet Explorer 6.0 SP1	Sun JRE 5.0	Existing
DC1.19	Windows 2000 SP4 (32 bit)	MS Internet Explorer 6.0 SP1	Sun JRE **6.0**	New
DC1.20	Windows XP Pro SP2 (32 bit)	MS Internet Explorer 7.0	Sun JRE **6.0**	New

2.1.2 Workstation Client environments for BOE

The following table specifies the baseline set of workstation client environments that SUS shall support for BOE.

Ref ID	Operating System	Browser	JVM	Status
DC1.13	Windows 2000 SP4	MS Internet Explorer 6.0 SP1	Sun JRE 5.0	Existing
DC1.14	Windows XP Pro SP2 (32 bit)	MS Internet Explorer 6.0 SP1	Sun JRE 5.0	Existing
DC1.19	Windows 2000 SP4 (32 bit)	MS Internet Explorer 6.0 SP1	Sun JRE **6.0**	New
DC1.20	Windows XP Pro SP2 (32 bit)	MS Internet Explorer 7.0	Sun JRE **6.0**	New

2.1.3 Workstation Client environments for EDT

The following table specifies the baseline set of workstation client environments that SUS shall support for EDT.

Ref ID	Operating System	Browser	JVM	Status
DC1.13	Windows 2000 SP4	n/a	Sun JRE 5.0	Existing
DC1.14	Windows XP Pro SP2 (32 bit)	n/a	Sun JRE 5.0	Existing
	Solaris 10 / Sparc	n/a	Sun JRE 5.0	

2.1.4 Workstation Client environments for Citrix

The following table specifies the total set of *Thin Client* (Citrix) environments that SUS supports for Service Management purposes.

Ref ID	Terminal Server OS	Browser	JVM	Terminal Server Software	Status
DC1b.1	Windows 2003 Enterprise SP2 (32 bit)	MS Internet Explorer 6.0 SP1	Sun JRE 5.0	Citrix Presentation Server 4.0 Enterprise	Existing
DC1b.2	Windows 2003 Enterprise SP2 (32 bit)	MS Internet Explorer 6.0 SP1	Sun JRE 5.0	Citrix Presentation Server 4.5 Enterprise	Existing

3 The Spine Portal

The function of the Spine Portal is to provide a single, secure point of entry to a number of applications being provided as part of the NHS Care Records Service. All BT developed applications are accessible through a web browser and the availability of each application depends upon your job role and its associated permissions.

Note: The screen images were captured from GemAuthenticate Client v5.2.1

3.1 To Log on to the Spine Portal

1. Insert your Smartcard into the card reader.

   The system will check the credentials of the Smartcard and then request you to enter your Passcode.

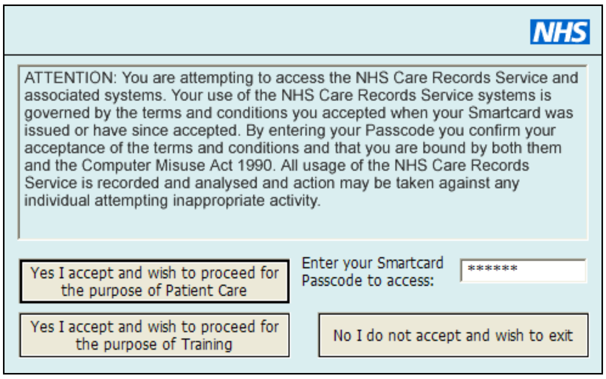


Figure 1 - Log on to the Spine Portal - Passcode required

2. Enter your Passcode.

3. If you have more than one job role, click the session role hyperlink you wish to use.

Figure 2 - Log on to the Spine Portal - Select your session role

Note: If you only have one job role the job role selection screen will not appear.

The following message (overleaf) will be displayed to confirm your name, organisation and job role. This will disappear after a few seconds.

Figure 3 - Log on to the Spine Portal - "You are logged on as"

You are now logged on to the Spine Portal. Open the Portal through any desktop shortcuts.

3.2 To Log off the Spine Portal

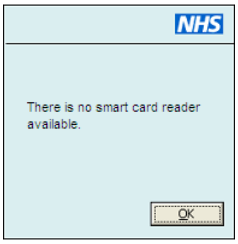
To log off the system, you simply remove your Smartcard from the card reader. Removal of the Smartcard will log you out of the Spine, its applications and the Spine Portal.

Warning: Simply removing your Smartcard may close any open Browser windows without warning and unsaved data may be lost. This may include Browser sessions that have been launched from outside of the Spine Portal. This depends on local configuration of your system.

4 To understand Smartcard and Portal Messages

Listed below are the potential Smartcard and Spine Portal problem messages that may be displayed:

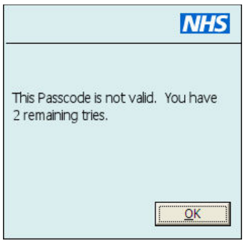
4.1 There is no Smartcard reader available



This message will appear at start up if your Smartcard reader has become detached from your computer. This message can also indicate that the Smartcard reader drivers have not been installed.

Reconnect your reader and restart your machine.

4.2 This Passcode is not valid. You have 'n' remaining tries



You have three attempts to enter your Passcode.

Click the **OK** button and enter the correct Passcode.

After three failed attempts your Smartcard will be locked (blocked).

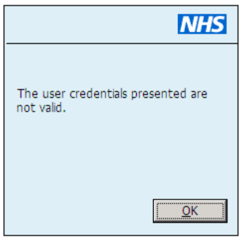
4.3 Your Smartcard is blocked

If you attempt to access the system with a locked (blocked) Smartcard you will be shown an error message.

This screen is also displayed when you have exceeded the invalid login attempts.

Contact your Registration Authority Personnel to have the Smartcard reset and unlocked.

4.4 The user credentials presented are not valid



This message appears if you try to authenticate with a Smartcard that is not valid. For example, someone permanently leaving the NHS would have their card revoked. If they tried to access the Spine using the revoked card they would be denied access.

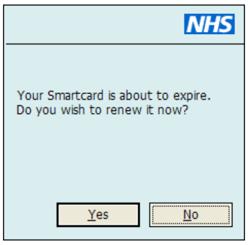
Contact your Registration Authority Personnel to investigate the Smartcard.

4.5 No certificate was found to perform authentication

This message indicates that the Smartcard contains no certificates to allow authentication.

Contact your Registration Authority Personnel to investigate the Smartcard and see if the certificates were written correctly.

4.6 Your Smartcard is about to expire. Do you wish to renew it now?



This message indicates that you are able to renew your certificate(s) without meeting an RA and you are within the expiry notification period.

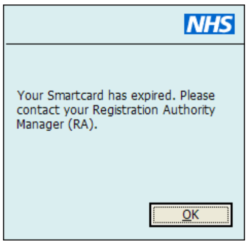
If you select **Yes** you will be presented with the Self Service Portal.

4.7 Your Smartcard is about to expire. You must renew now

This message indicates that you are able to renew your certificate(s) without meeting an RA and you have to complete this action now; you have reached the end of the expiry notification period.

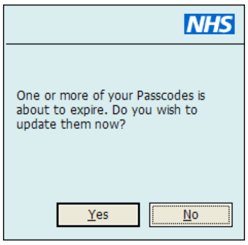
When you select **OK** you will be presented with the Self Service Portal.

4.8 Your Smartcard has expired. Please contact your Registration Authority Manager (RA)



This message indicates that you have passed the expiry notification period and are unable to use your Smartcard. You must contact your RA Manager to re-enable access.

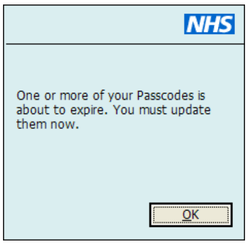
4.9 One or more of your Passcodes is about to expire. Do you wish to update them now?



This message indicates that at least one of your Passcodes is about to run out. This could be your **Account Recovery, Verification and/or Smartcard Passcode.**

If you select **Yes** you will be presented with the Self Service Portal.

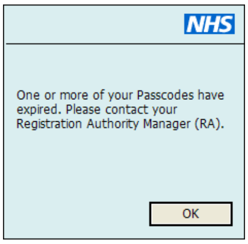
4.10 One or more of your Passcodes is about to expire. You must update them now



This message indicates that at least one of your Passcodes is about to expire and you have to alter it/them now.

When you select **OK** you will be presented with the Self Service Portal.

4.11 One or more of your Passcodes have expired. Please contact your Registration Authority Manager (RA)



This message indicates that at least one of your Passcodes has expired. You must contact your RA Manager to re-enable the Passcode(s).

4.12 An unexpected error occurred during the authorisation process

At any time when logging on to the Spine Portal, or during general system usage you may encounter the "An unexpected error occurred during the authorisation process" error message.

Follow the instructions shown and click the hyperlink to Return to Portal Page; you may need to log on again.

4.13 Connection to the server or http request to the server failed

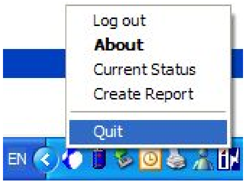
When logging on to the Spine Portal, you may encounter the "Connection to the server or http request to the server failed" error message.

To resolve the message carry out the following steps.

1. Click the **OK** button and try logging on again.

   If the message reappears you will need to remove your Smartcard then close and restart GemAuthenticate.

2. Close GemAuthenticate by right clicking the **GemAuthenticate** Icon in the system tray at the bottom right of the screen.



3. Click **Quit** from the menu.

4. Restart GemAuthenticate by following the path below:

   Start | **Programs** | **Gemplus** | **GemAuthenticate** | **GemAuthenticate Client**

5. Try logging on again.

6. If the message reappears you need to save all work and restart the computer.

   If this has not resolved the message, contact your help desk to check service availability.

5 Getting Started

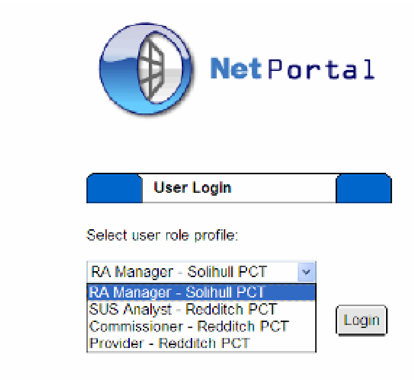
The applications and reports that are available via the SUS Toolkit are only accessible to you after you have identified yourself to the system by logging in. You will log in through the NHS CRS Spine Portal.

1. Log on to the Spine Portal.
2. Click the Launch Data Access Service hyperlink from the Portal.
3. Answer the following questions to navigate through the potential login screens.

Do you have more than one job role?

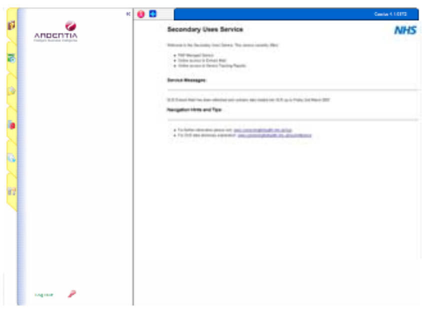
YES

NO



You must select the required role for using the Toolkit.

The welcome screen appears



Using the previous diagram. If you have one job role you will log straight in to the SUS toolkit from the Spine Portal however with multiple job roles and/or schemas you will complete steps 4 and 5.

4. Select the job role (and note within which specified organisation) to use in this SUS session.

   Note: The schema list is linked to the job role.

5. Click the **Login** button.

5.1 To Logout of the SUS Toolkit

> Note that when you logout of the SUS Toolkit you will still remain logged on to the Spine Portal.
>
> If you have one job role and one schema you will return to the Spine Portal.
>
> If you have multiple job roles and/or schemas you will be returned to one of the user login screens, allowing you to perform a different role within SUS without having to re-authenticate.

1. Click the **Log Out** key at the foot of the Navigation Bar. 

6 Navigate the SUS Toolkit

6.1 Screen Layout

The screen layout is divided into four areas:

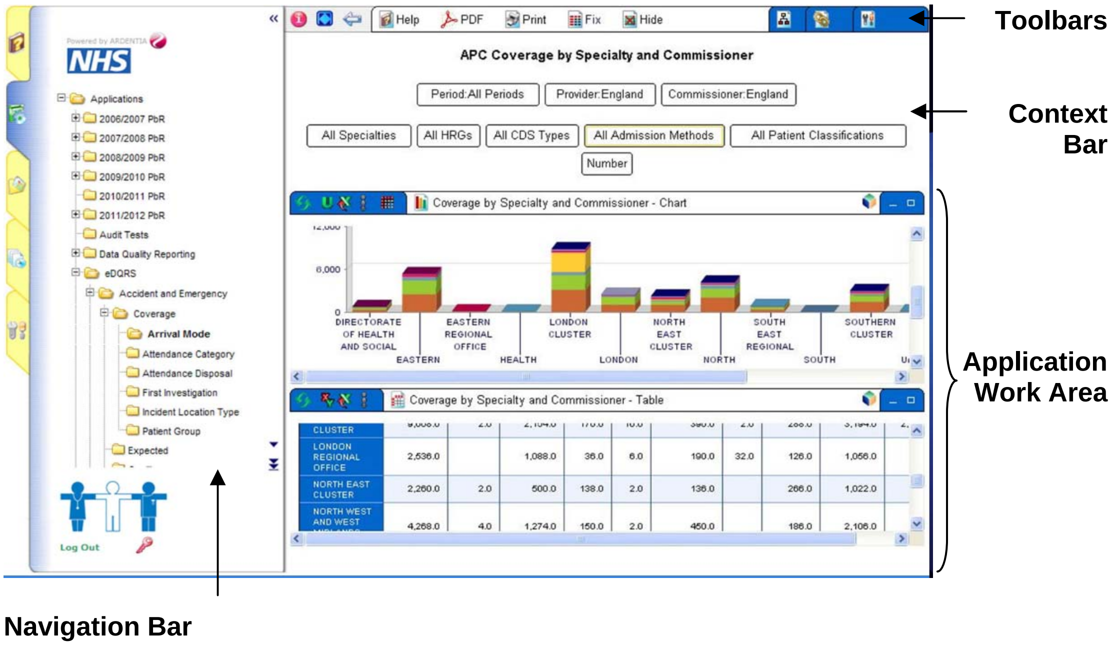


Figure 4 – The Screen Layout

6.2 Toolbars

The toolbar area contains both static and dynamic toolbars. The static toolbar is displayed at all times to the left hand side. The dynamic toolbars (to the right hand side) are only displayed when you are viewing a report and can be displayed or hidden as required.

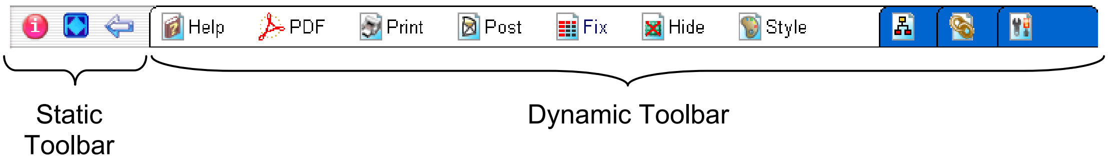


Figure 5 – Static and Dynamic Toolbars

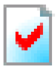
6.2.1 The Static Toolbar

The following buttons appear on the static toolbar:

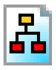
	**Information**	View information about the current connection and the software version.
 OR 	**Expand Workspace** **Restore Workspace**	Hide the toolbar and application menu area and maximise the screen. Click again to return to original state.
	**Back**	Display previously viewed page.

6.2.2 The Dynamic Toolbars

In addition to the static toolbar there are four dynamic toolbars only one of which can be displayed at a time. The four dynamic toolbars are:



Report Toolbar
The default displayed toolbar when a report is accessed.



Menu Links
Provides links to all other reports in the current application.

Linked Reports
Provides links to other reports that have particular bearing to the currently displayed report.

Report Settings
Provides links to further settings for the currently viewed report.

6.2.3 The Report Toolbar

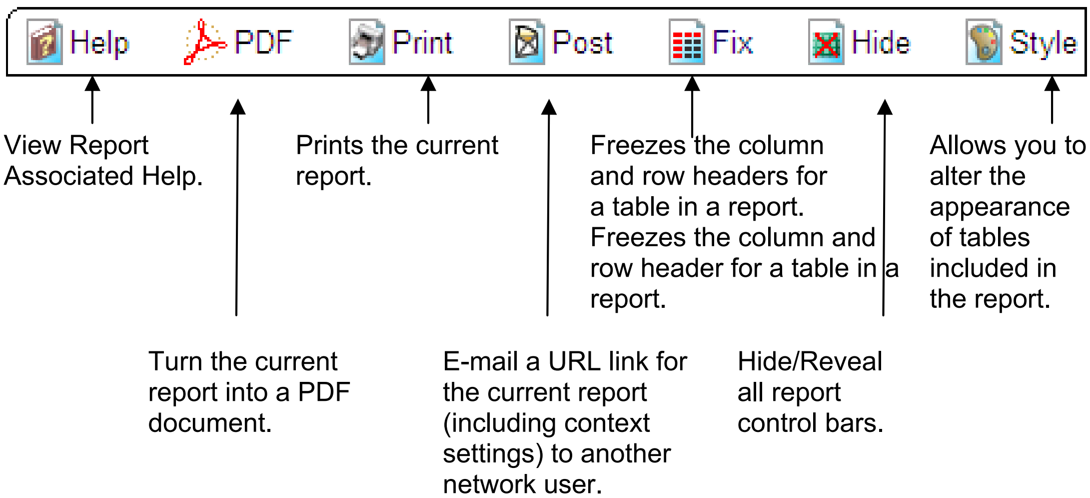


Figure 6 – Dynamic Toolbars – The Report Toolbar

6.2.4 The Report Settings Toolbar

1. Click the **Report Settings** button to switch to this toolbar.

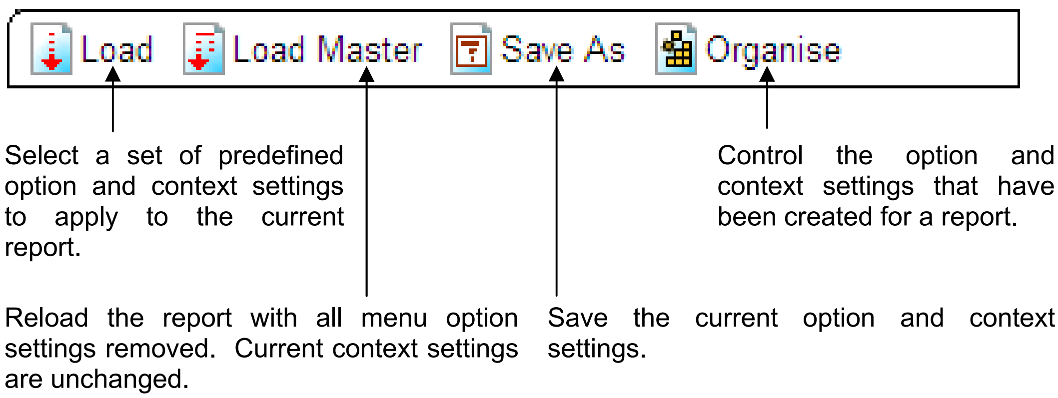


Figure 7 – Dynamic Toolbars – Reports Settings Toolbar

2. Click the **Report Bar** button to return to the Report toolbar.

6.3 The Navigation Bar

The Navigation Bar is divided into several tabs which enables you to access Help, Applications, Stored documents, the Report Scheduler and User Settings. The Navigation Bar displays folders containing the reports you are able to access when you are in the Application Tab. When using other tabs such as User Settings large icons are displayed which offer further functionality.

6.4 The Context Bar

The Context Bar enables you to alter the data within a report.

6.5 Application Work Area

This is the main body of the screen where everything happens; it holds applications and reports. You may be able to manipulate the report data by using the context settings/report options if available. Forms and dialogs are also shown here.

6.6 Running Applications

Applications are logical groupings of dynamic reports and extracts.

Applications are displayed in the form of a hierarchical menu in the Navigation Bar. This structure can be expanded and collapsed by clicking the appropriate plus or minus to the left of the folder. When you click to select an application, a list of reports contained within the application is displayed in the Application Work Area.

6.6.1 To Access Applications and run Reports

1. Click the **Applications** tab on the Navigation Bar.

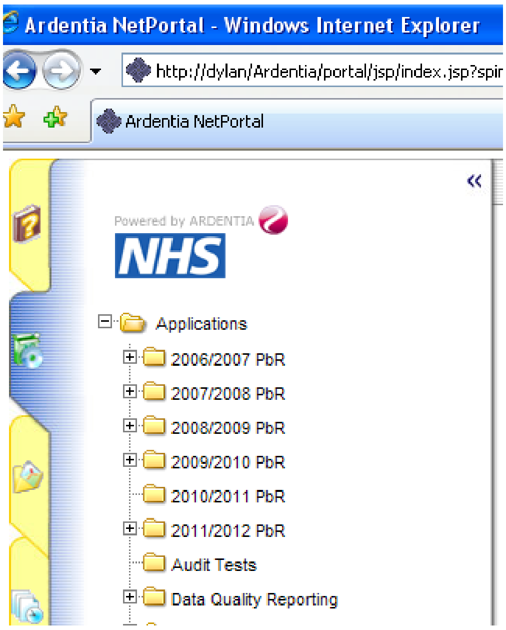


Figure 8 – The Application Menu

2. Click the folder structure to navigate and locate the application containing the required report you wish to view.

   The results of the report within a selected application will be displayed in the Application Work Area.

3. Click on a **report** to run it and view within the Application Work Area.

6.6.2 Reports and Analyses

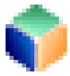
Each report consists of either a relational data source analysis (NetQuery) or an OLAP (Online Analytical Processing) data source (NetInform) analysis.

6.6.3 Identifying the Analysis types

The functionality of a NetQuery analysis and a NetInform analysis is slightly different. To the right hand side of the Frame (Table) Control Bar there is an icon which indicates which type of analysis you are using.

6.6.4 Comparison of Analysis types

NetQuery
- Creation of Queries



NetInform
- Ability to Drill Up and Down through data
- Apply Overlays

NetInform

- Traffic Lighting
- E-mail Personalised report to user
- Remove blank rows/columns
- Greater personalisation of reports

6.6.5 NetInform Analyses

Throughout this toolkit you will come across the following terms. They are explained below.

OLAP OLAP (Online Analytical Processing) allows you to investigate and picture the data in an interactive environment. It is capable of returning complex searches and hierarchical results instantly.

Multidimensional OLAP cubes are multi-dimensional, this allows you to analyse data across multiple axes.

6.6.6 NetQuery Analyses

These are based upon Relational databases and do not provide the same level of functionality or manipulation of data. NetQuerys allow the generation of user queries.

6.7 To access the SUS Toolkit Help

1. Click the **Help** tab on the Navigation Bar.
2. Click the folder structure to navigate to the required help folder to view.
3. Use the **Contents** or **Search** options.
4. Click on **Contents** to open a folder structure and navigate through a hierarchy to the required help topic.
5. Click on **Search** and navigate through the alphabet to the required help topic.

6.7.1 SUS Report Help

Context sensitive Help about the reports and extracts to which you have access may be available (depending on whether or not Help was attached when the report or extract was developed) by clicking any of the following buttons.

The Help **View Report Associated Help** button on the **Report Toolbar** will provide any linked assistance regarding the report you are working with, this may include metadata information.

A Help **Help** button within a dialog box will provide assistance regarding the active action you are undertaking.

The Help **Help** button at the top of a list of reports will provide further information about that group of reports/extracts. This button will only display in a folder if an online help file has been configured for the displayed folder.

The help for the report or extract is displayed in the Help Viewer.

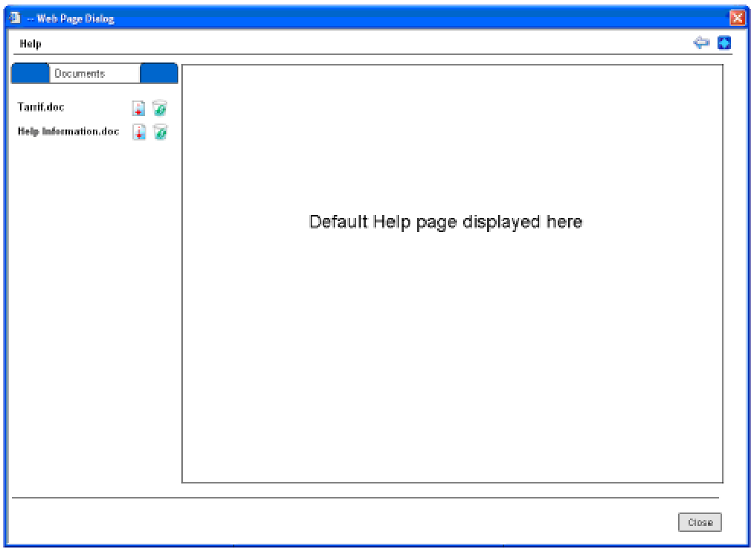


Figure 9 – The Help Viewer

The Help Viewer displays help associated with the report or extract (or groups of reports/extracts) with any other documents or hyperlinks that have been uploaded by an Administrator.

Select a document or link to view the help contents.

Click the **Download** button to store a local copy of the help file.

7 Work with Analyses

7.1 Elements of an Analysis

Reports often consist of a combination of the following elements:

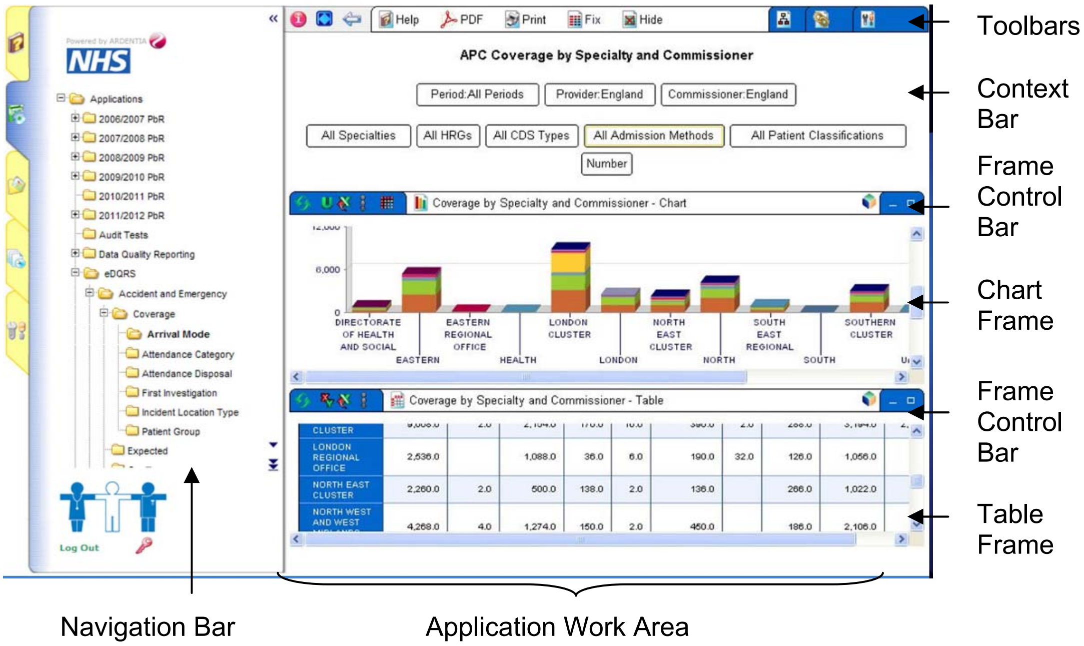


Figure 10 – Analysis Elements

Frames contain the data that is returned by the report, and the Frame Control bars allow you to manipulate that data.

7.1.1 Chart Frame

Charts are a graphical representation of the results that are returned by running either a relational query (NetQuery) or an OLAP analysis (NetInform). Please be aware that a chart is not always a reflection of the data displayed in the Table Frame as it has its own underlying data table that can differ from the data displayed in the Table Frame.

The chart displayed is not a static image, as you can move your mouse over the graph and be provided with details regarding the underlying data.

A chart is controlled using the chart frame control bar and interactive Pop-up menus. NetInform charts have additional dynamic controls.

Tool tips display labels and values as you pass your mouse over the chart. Clicking labels and other areas of the chart display Pop-up menus.

7.1.2 Table Frame

Tables contain the results that are returned by running either a relational query (NetQuery) or an OLAP analysis (NetInform); the table is a grid of values.

Tables can be controlled using the associated Frame Control bar as well as interactive Pop-up menus and dynamic controls, these are accessed by moving the mouse over the data in the table. A number of interactive features are available when you click the row and column headers or move the mouse over rows, columns and cell values.

Clicking either a column or a row header displays a Pop-up menu that enables you to apply changes to the context of the table.

7.1.3 Frame Control Bars

Frame control bars are similar to 'Windows-style' toolbars and resize controls. They control the content of the individual frame and not the whole screen window. As you move around the screen Tooltips will reveal button descriptions.

7.1.4 Context Bars

The content of a NetInform report can be changed based on a set of dynamic controls that affect which data is displayed at any one time.

When working with analyses you are able to sort or filter the displayed data. This will enable you to format the results to illustrate a point or restrict the information displayed.

The items within the context bar are known as dimensions. These dimensions can either be, swapped with dimensions already in the report, added to, or nested within a report.

7.1.4.1 To use the Context Bars within a NetInform Analysis

Reports have columns (the down axis) and rows (the across axis) each of which is classed as a single dimension. You can make use of the context bar to adjust the layout and add data items in your report and make the output multi-dimensional.

Single Dimension "Down" Axis

Single Dimension "Across" Axis

		All Specialties	Medical Specialties	Mental Health	Obstetrics And Gynaecology
England	2001/02	39,294,941	13,145,249	1,210,216	3,760,485
	2002/03	48,559,217	16,324,951	1,567,839	4,499,184
	2003/04	49,689,710	16,680,625	1,567,973	4,618,402
	2004/05	3,339,985	1,124,604	72,841	297,779
	N/K	5,444,044	1,997,581	247,008	623,047
LONDON	2001/02	930,044	283,485	1,801	93,810
	2002/03	6,786,805	2,544,264	72,477	733,677
	2003/04	8,204,166	3,138,497	177,193	935,057
	2004/05	695,995	264,426	9,223	78,361
	N/K	18	6		

Figure 11 – Example of Dimensions and Nesting

NetInform reports are based on OLAP cubes which are multidimensional and give the additional functionality of being able to "slice" the data up. This is formally known as a "slicer" axis. "Slicer" or "through" dimensions are controlled by the Context bar. The slicer axis alters the displayed results e.g. displays numbers or percentage, whilst table axes are the displayed labels for the columns and rows.

Many report layouts can be produced through the use of the Context bar. You are therefore able to tailor your reports to meet your requirements.

1. Click any of the **Dimensions** in the context bar.

   The Dimension Navigator dialog box opens.

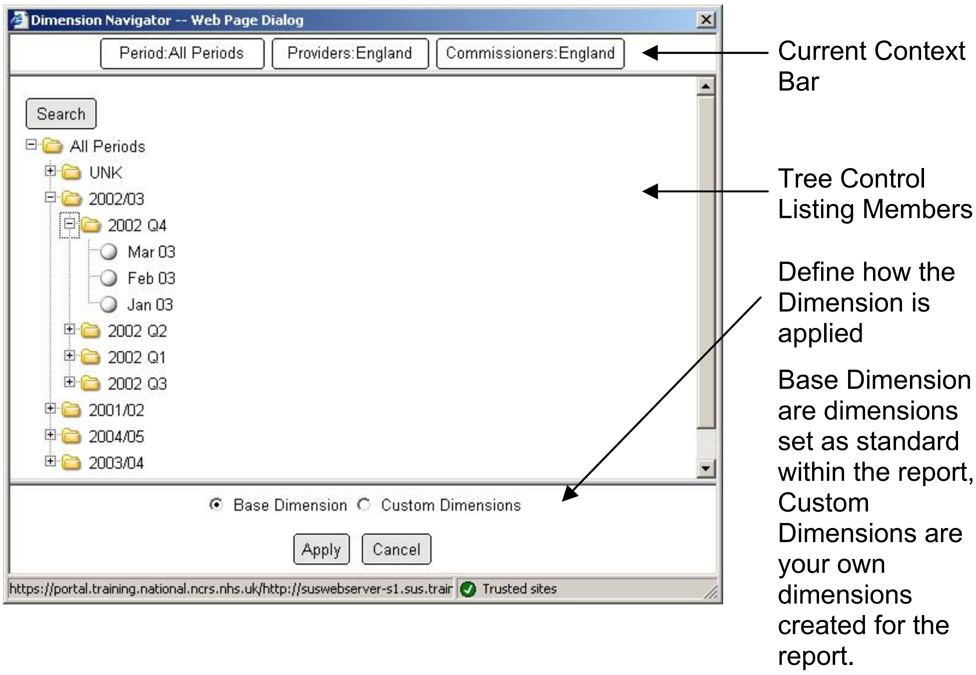


Figure 12 – Example of Dimension Navigator dialog box

2. Click a **Dimension Selector** at the top of the dialog to change the Tree Control if required.
3. Click within the hierarchy a **Plus** or **Minus** to open or close the members listed.
4. Click the **Folder** or **Selection** button to select the member name listed. This will change the labels of the context bar to reflect the selection made.

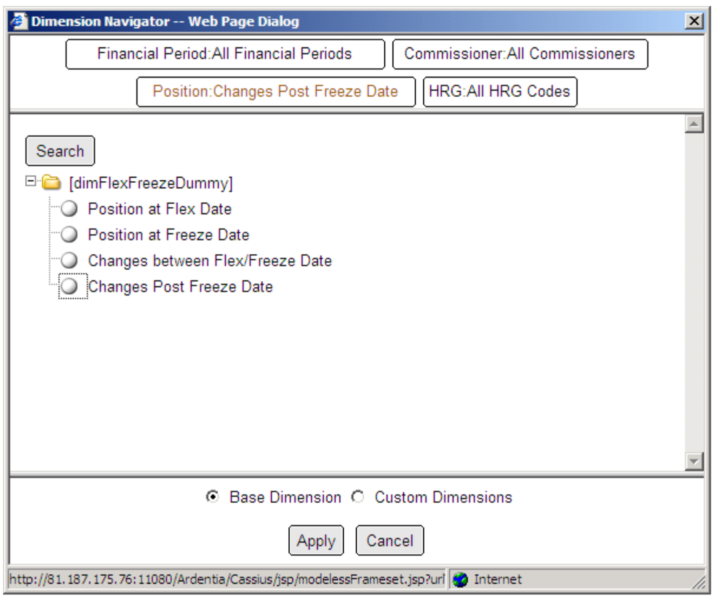


Figure 13 – Dimension Navigator dialog box – Other Member

5. Click the **Apply** button to complete.

7.1.4.2 To Search for a Specific Dimension Value

To find a specific dimension you can use the search facility rather than navigating through the tree control.

1. Click the **Search** button.
2. Type the dimension you are searching for.
3. Click the **OK** button.

   The returned results will be those that contain the dimension searched for.
4. Click a returned value to set the dimension selector value.

7.2 To Drill through data using Dynamic Controls within a NetInform Analysis

Each report includes a set of dynamic controls that can be used to manipulate the data returned by the report and the charts. This involves clicking buttons on toolbars, selecting options from hierarchical menus or Pop-up menus. In addition Dynamic selectors appear when the mouse is at a particular location on the screen.

Dynamic selectors appear over the data allowing data to be selected via “Drill up” and “Drill down” functions.

As you move your mouse around the contents of a report Tool tips appear indicating various actions that can be completed or the data value of the cell you are over.

	All Specialties	Medical Specialties
England	4,058,069	1,846,383
London	513,040	232,805
Midlands	1,799,571	818,798
North	966,750	438,421
South	778,708	356,359

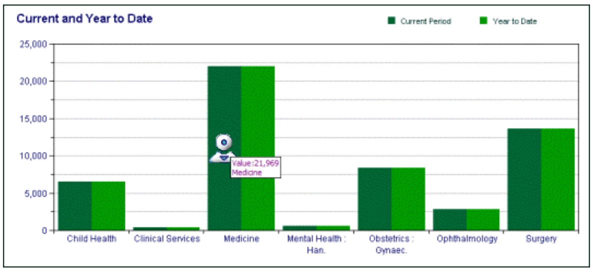
Figure 14 – Example of Parent and Child structure

Within a table, indentation signifies that a subset of the parent data is being displayed; this is known as child level data. Figure 13 illustrates the parent data set as England and the child data sets as London, Midlands, North and South.

7.2.1 Drill Controls

Tables: When the mouse is moved to the right hand side of a label a navigation control is displayed. This control provides the ability to drill up or down within the selected member or activate the context bar selection dialog.

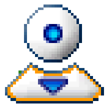
Charts: Moving the mouse around the graph will also activate the navigation control.



	All Specialties
LONDON	16,617,028
NORTH CENTRAL LONDON SHA	3,728,644
NORTH EAST LONDON SHA	4,274,379
NORTH WEST LONDON SHA	3,121,627
SOUTH EAST LONDON SHA	2,074,844
SOUTH WEST LONDON SHA	3,417,534

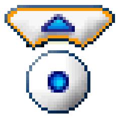
Figure 15 – Dynamic Selectors – Chart and Table examples

This is a powerful and useful feature in which you can investigate higher and lower levels of the data.



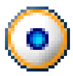
Drill Down

This control will drill down into the data to show greater detail of the selected dataset.



Drill Up

This control changes the view to display the parent data of the selected data member. It also displays data for the parent's siblings.



Navigation Anchor

This control displays the **Context Bar Selection** window for the currently highlighted member. From here you can change the settings for the context in use.

1. Move the mouse over a table/chart.

   The drill up/down control will appear and disappear. To keep it visible ensure the mouse is over a label or chart segment.

2. Click the **Drill Up** or **Drill Down** control.

   The relevant buttons appear depending on the current position within the hierarchy.

   Note: When you have drilled down as far as you can for the selected dimension you are at the bottom of the hierarchy. The values displayed are classed as the 'leaf nodes'.

8 Work with Pop-up Menus

Through the use of Pop-up menus you are able to change the core data used as the structure for a table/chart within the report.

- Click the centre of a cell or header to activate a Pop-up in a table.

  Or

- Click either the border or centre of a chart to activate a Pop-up in a chart.

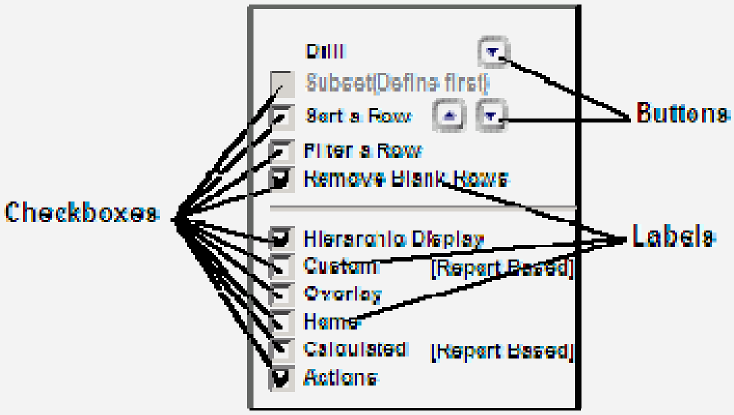


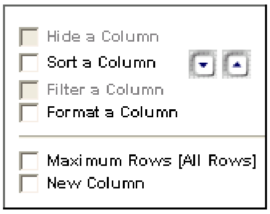
Figure 16 – Pop-up Menu Labels and Checkboxes

When a label in the Pop-up menu is clicked a dialog box is displayed enabling the selection of further options. The options that appear in a Pop-up depend on the choice of dimension member or label.

1. Click the **Pop-up menu label text** to go into the chosen option.
2. Click the **checkbox** next to the label to deselect and remove settings.

   The availability of Pop-up menus and the options that they offer depends on the report type that is being viewed.

NetQuery Table Pop-up



NetInform Table Pop-up

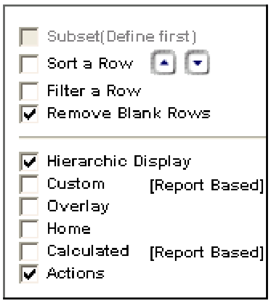


Figure 17 – Comparison of NetQuery and NetInform Pop-up menus

The Pop-up that appears is dependent upon the location clicked within the report table. The table in Figure 18 illustrates the various Pop-ups that may appear for NetInform reports.

<u>Note</u>: Be aware that not all options are available in every Pop-up.

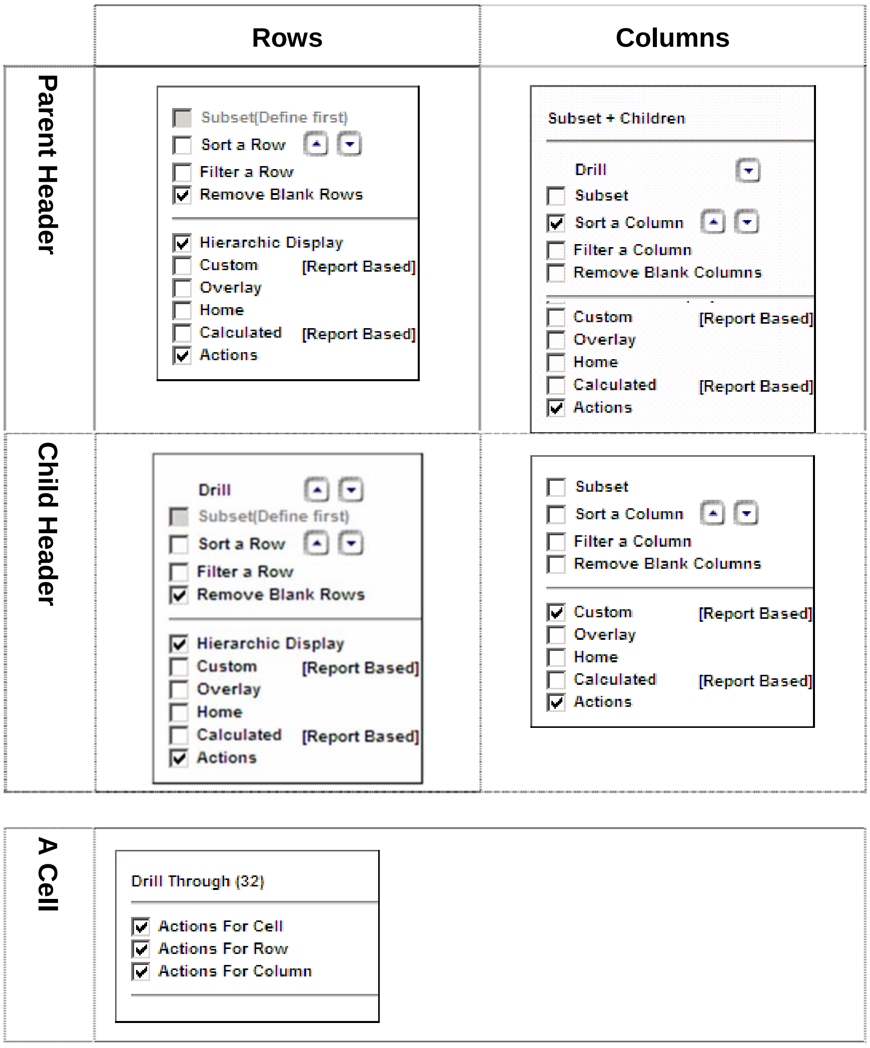


Figure 18 – Sample NetInform Pop-up menus by location

9 Work with Pop-up Menus - Drill

9.1 To Drill through data using the Pop-up menu

Through the Pop-up menu you are able to explore the reports data in more detail by using the **Drill-up** and **Drill-down** buttons. This functionality is also available using the Dynamic Drill Controls (see page 30).

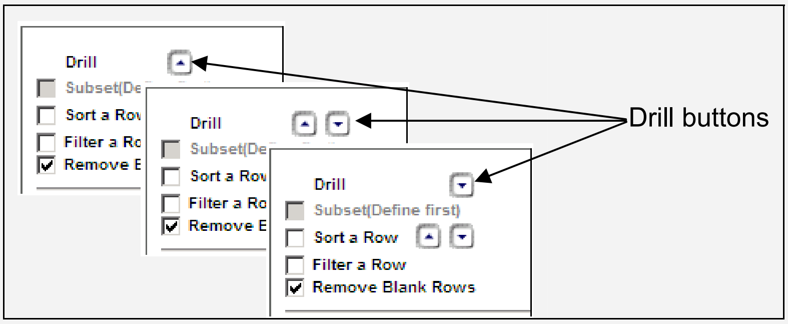


Figure 19 – Pop-up Menu – Drill options

1. Click the centre of the **Column/Row Heading** you wish to "Drill" in order to open the Pop-up.
2. Click either the **Drill-up** or **Drill-down** buttons to explore.

   Note: The availability of the **Drill-up** and **Drill-down** buttons is dependent upon your position within the data hierarchy.

9.2 Dependent Selectors

Dependent Selectors is a toolkit feature designed to warn you when drilling down to where there is no data for the currently selected context. The folder labels or member names will appear 'greyed out'. If you attempt to access a "greyed out" item you will see the following message "**Your selection contains no data! Click the OK button to proceed, or the Cancel button to make a different selection**".

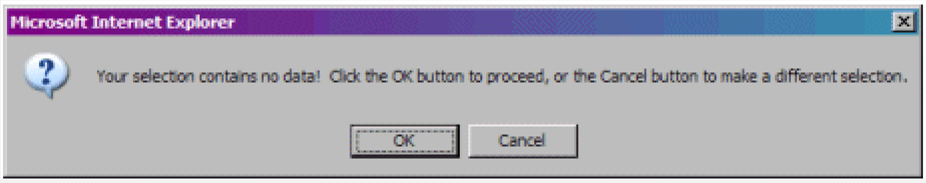


Figure 20 – Dependent Selectors Warning Message

You can select **OK** to continue (as you may be looking for combinations where there is no data,) or **Cancel** to select a different dimension.

10 Work with Pop-up Menus - Subset

10.1 To define a Column or Row Subset

When viewing the results of an analysis in a table, you may find that you are only interested in a range of values or columns as opposed to the entire set of results.

In the example below, you may only be interested in a subset of the information returned by the analysis. For example, you may only be interested in data for “Medical Specialties”, “Obstetrics And Gynaecology” and “Surgical Specialties”.

	All Specialties	Medical Specialties	Mental Health	Obstetrics And Gynaecology	Other	Radiology and Pathology	Surgical Specialties	Unknown
England	146,327,897	49,273,010	4,665,877	13,798,897	674,868	4,484,286	68,352,204	5,078,755
LONDON	16,617,028	6,230,678	260,694	1,840,905	116,597	680,474	7,159,022	328,658
MIDLANDS	31,212,693	10,761,472	954,486	2,880,262	144,722	719,072	15,386,027	366,652
NORTH	32,164,954	10,862,364	1,064,630	3,150,325	134,745	1,082,565	15,358,592	511,733
SOUTH	25,450,135	7,396,706	880,034	1,896,814	132,112	724,688	11,990,651	2,429,130
Unknown Region	40,883,087	14,021,790	1,506,033	4,030,591	146,692	1,277,487	18,457,912	1,442,582

Figure 21 – Sub-setting – Starting Point

The SUS Toolkit provides you with the ability to define a ‘dynamic’ subset for either rows or columns. This is achieved by simply selecting specific row and column headings.

Note: All subsetting options can be applied to charts by switching to data view, manipulating the table, and returning to the chart view.

Some charts may reference specific row and column values. By subsetting the data used as a basis for the chart, you may unintentionally conceal data used as the basis for a chart. This may result in a blank chart or message indicating that the current chart cannot be drawn. Reappearance of the chart will occur when the subset is removed.

1. Press and hold the **Ctrl** key on the keyboard. Define subset mode is now active.
2. Select each column/row to be included in the subset by clicking its header. (Ensure that the **Ctrl** key continues to be pressed whilst doing so).

   Each selected column/row header will be highlighted to indicate that the column is to be included in the subset.
3. When you have finished selecting the columns/rows required release the **Ctrl** key.
4. Single click a column/row header to open the **Pop-up menu**.

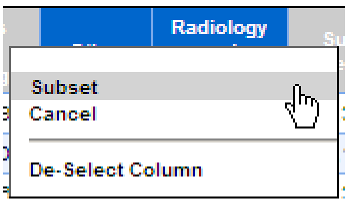


Figure 22 – Subset Pop-up menu

5. Click **Subset** to apply your selections and complete subsetting.

   The table will now only display the columns/rows selected.

10.2 To remove Subsetting

1. Deselect the **Subset** checkbox on the **Pop-up** menu.

   Or

   Click the **Reset Table** icon on the toolbar.

10.3 To reapply a Subset

Once a subset has been applied and removed it can be reapplied by using the Pop-up menu and selecting Subset. If no subset has been defined the Pop-up menu informs the user that a subset needs defining.

Subset Not Defined Subset Defined

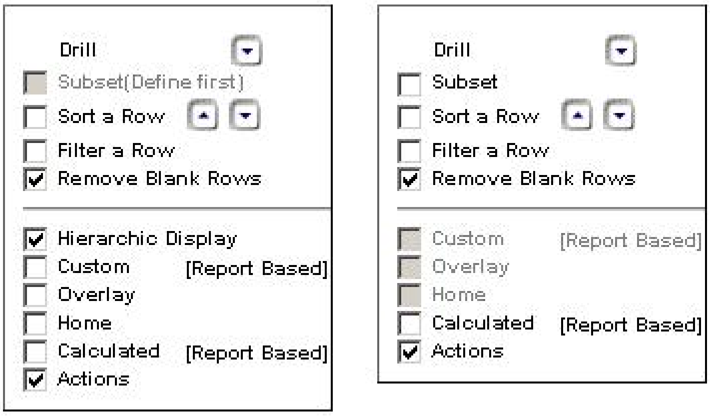


Figure 23 – Reapplying a Subset

10.4 To reorder Columns or Rows using Subsetting

When defining a subset the order of selecting rows or columns defines the order in which the data is displayed in a table. Subsetting can therefore be used to reorder a table.

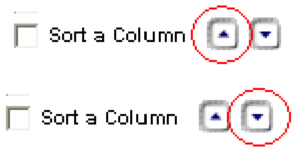
<u>Note</u>: Applying subsetting only lasts for the current session; afterwards the report will reset to its original settings.

11 Work with Pop-up Menus - Sort

11.1 To perform a Simple Sort of Columns or Rows within a NetInform Analysis

Columns or Rows can be sorted in ascending or descending order using a selected column/row.

1. Click the **column/row** label to sort.
2. Click the **Ascending** or **Descending** icon to specify the sort order to apply.

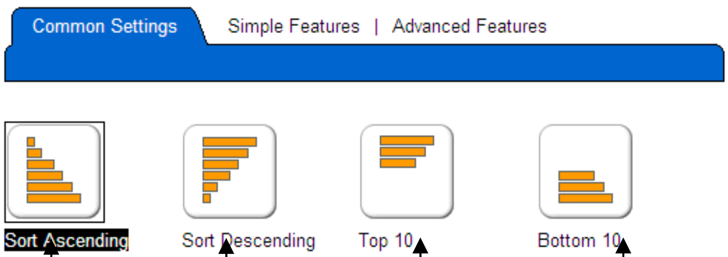


Ascending

Descending

11.2 To perform an Advanced Sort within a NetInform Analysis

1. Click a **Column Heading** to display the Pop-up menu.
2. Click the **Sort a Column** label to see the three tabs available:
   - Common Settings
   - Simple Features
   - Advanced Features
3. Click the **Common Settings** tab and select any setting to apply.



Sort Ascending	Sort Descending	Top 10	Bottom 10
Sorts the selected column numerically in ascending order (1,2,3,4 …) and displays all visible data.	Sorts the selected column numerically in descending order (…4,3,2,1) and displays all visible data.	Sorts the selected column and displays the top 10 visible data items sorted in descending order (10,9,8 …1).	Sorts the selected column and displays the bottom 10 visible data items sorted in ascending order (1,2,3,4 … 10).

Figure 24 – Sorting with NetInform – Common Settings

4. Click the **Simple Features** tab to set further options.

   The **Sort Against** field allows you to specify whether to sort against the Current Context of the report or the currently selected column/row.

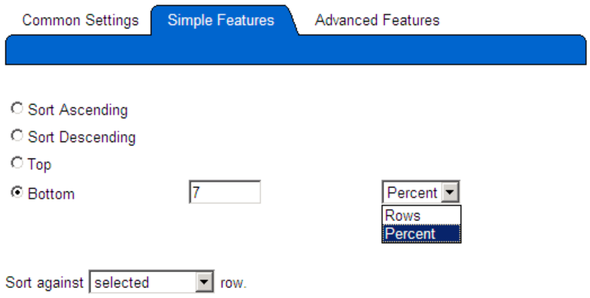


Figure 25 – Sorting with NetInform – Percent/Rows

When using Top or Bottom you can define the values returned as being a specific percentage of the total or a defined number of rows.

5. Click the **Advanced Features** tab to define complex settings.

   Be aware that the tab content will alter dependent on the settings chosen. If the **Sort** checkbox is unchecked the tab will be blank.

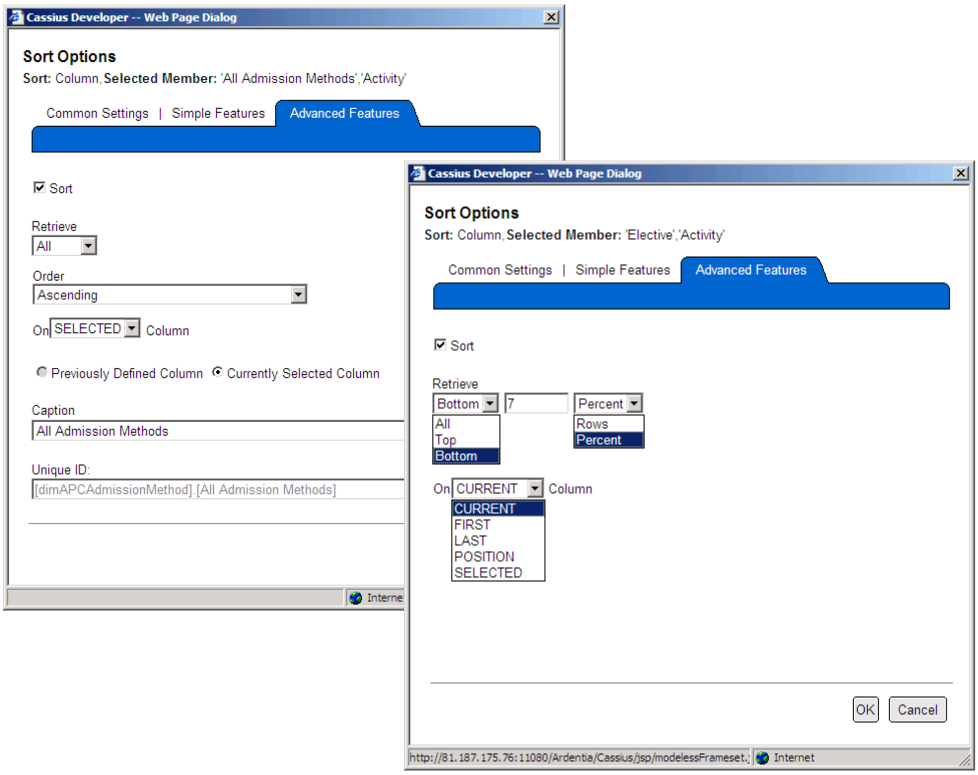


Figure 26 – Sorting with NetInform – examples of the Advanced Features tab

6. Click the **Sort** checkbox to apply the advanced sort.
7. From the **RETRIEVE** field select the data to be returned.
8. Select the **Order** of the sort.

   This will only be applied if the **RETRIEVE** field is set to All.
9. Select which **COLUMN/ROW** the sort order should use.

   The currently selected column/row radio button is set as default.
10. The **CAPTION** field is read only and only available when you have chosen “SELECTED” column/row.
11. The **UNIQUE ID** field is read only and only available when you have chosen “SELECTED” column/row.
12. Click the **OK** button to complete.

11.3 To remove a Sort

1. Click a **Column/Row Heading** to display the Pop-up menu.
2. Deselect the **Sort a Column/Row** checkbox.

12 Work with Pop-up Menus - Filter

12.1 To perform a Simple Filter within a NetInform Analysis

When viewing large amounts of data it is often useful to filter the data in a way that allows you to prioritise or qualify the information you are looking at.

The toolkit provides a range of features to support the filtering of row and column data. You are able to specify multiple filter conditions using standard logical operators (AND, OR) that allow you to divide up (or filter out) values in the table data.

Filtering effectively subsets (or filter out values from) the table that meet the user's conditions.

Each filter condition is an expression that consists of two sides; a Left Hand Side (LHS) and a Right Hand Side (RHS) with an operator (>,<,<>,>=,<= etc). The LHS and RHS identifies a target column and a value to test against (e.g. field > 8000 AND field < 800000).

Whether or not you are filtering rows or columns depends on which label you clicked on to bring up the Pop-up menu.

- Clicking a column label will apply the filter to the rows that appear down the page.
- Clicking a row label will filter the columns that appear across the page.

1. Select the **Column/Row Heading** you wish to filter to display the Pop-up menu.
2. Select the **Filter a Column/Row** label.

   The **Filter Options** dialog box is displayed with the **Simple Features** tab displayed by default.

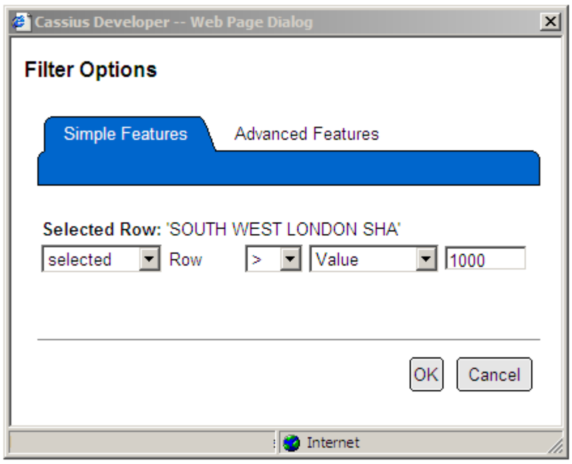


Figure 27 – Filtering Options – Simple Features

The filter illustrated in the figure above produces results where the values for the South West London SHA (the selected row) are greater than 1000.

12.1.1 To change the filter

1. Select what to **Filter Against** - either the **"selected"** column/row or the report's **"context"** (selected).
2. Select an **operator** from the **Condition** drop down list as required.
3. Select the area to apply the filter to (**Comparator**).

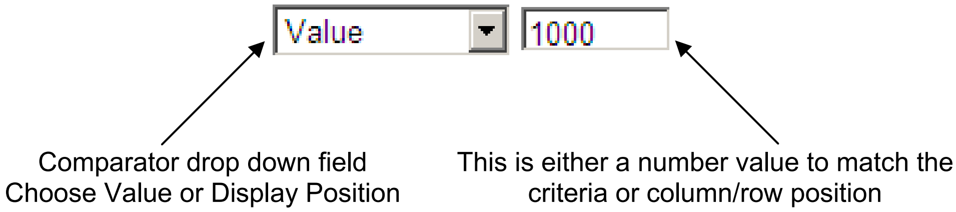


Figure 28 - Value/Display Position drop down field

Value	All values that match the criteria.
Display Position	Within the selected column/row defined by number - columns left to right or rows top to bottom.

4. Enter a **VALUE** into the field.
5. Click the **OK** button to complete the process and apply the filter.

12.2 To use an Advanced Filter within a NetInform Analysis

1. Select the **Column/Row Heading** you wish to filter to display the Pop-up menu.
2. Select the **Filter a Column/Row** label.

   The **Filter Options** dialog box is displayed with the **Simple Features** tab displayed by default.
3. Click the **Advanced Features** tab to create a more complex filter.

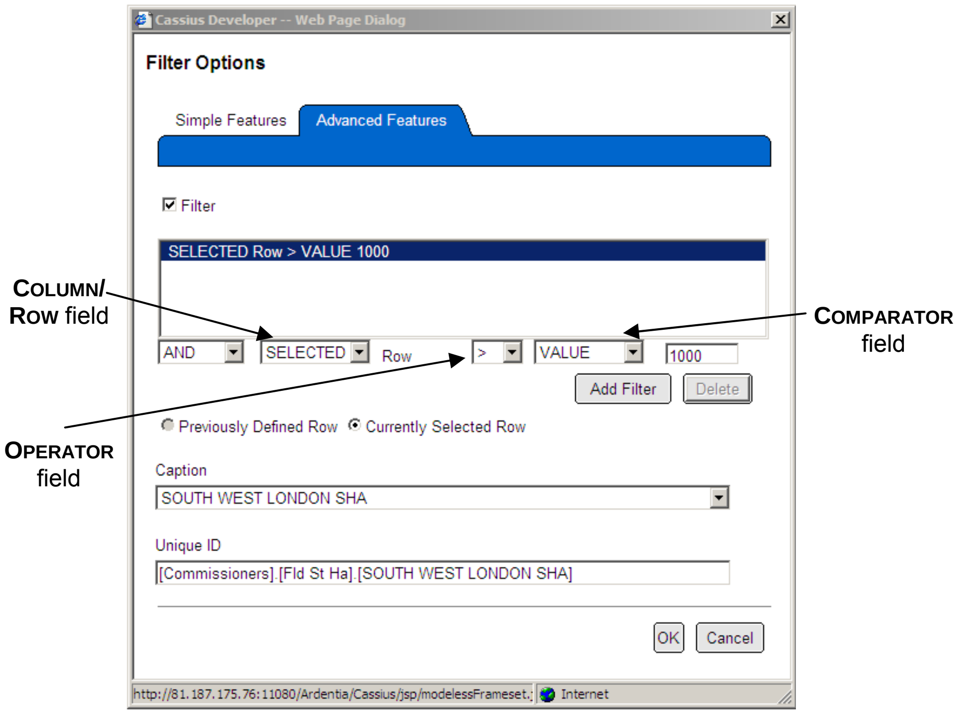


Figure 29 – Filtering Options – Advanced Features tab

4. Ensure the **Filter** checkbox is “Ticked” to apply the advanced filter.

   The read only **Filter Builder** area is populated with a default value based on any applied Simple filter.

The **Delete** button is used to remove a highlighted condition from the **Filter Builder** area.

The **Add Filter** button is used to insert a new filter condition into the **Filter Builder** area.

12.2.1 To edit conditions

5. Use the **COLUMN/ROW** field to edit/select what to use as the left side of the additional condition.
6. Select an **operator** from the drop down list to edit/select the operator.
7. Use the **COMPARATOR** field to edit/select what to use as the right side of the additional condition.
8. Type in a value if either “Position” or “Value” was selected in the **COMPARATOR** field.

12.2.2 To add a filter condition

9. Click the **Add Filter** button.

   Follow the above steps to add further conditions.

10. Click the **OK** button to set the filter.

12.3 To remove a Filter

1. Click the **Column/Row Heading** to display the Pop-up menu.
2. Deselect the **Filter a Column/Row** checkbox.

13 Work with Pop-up Menus - Null data

13.1 To remove Blank Rows and Columns within a NetInform Analysis

You can filter out blank rows and columns from the output.

1. Click a **Column/Row Heading** to display the Pop-up menu.
2. Click the **Remove Blank Columns/Rows** label.

   Or

   Select the **Remove Blank Columns/Rows** checkbox.

13.2 To Plot Zeros and Nulls

Charts can be based on various subsets of the available data. You may find that for any one analysis there are a number of charts, each of which provides different interpretations of the data. It is possible that data charted includes null (blank) values and/or zero values. The decision to display these values is controlled by the use of the Pop-up menu and the 'Plot Zeros' and 'Plot Nulls' options.

1. Click within the Chart to display the Pop-up menu.

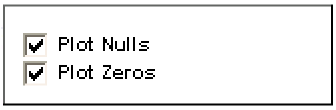


Figure 30 – Plot Nulls and Zeros Chart Pop-up Menu

2. Click the **Plot Nulls/Zeros** label or checkbox.

14 Work with Pop-up Menus - Hierarchic Display

14.1 To use a 'Common Settings' Hierarchic Display within a NetInform Analysis

Dimensions are hierarchical sets of related data items. Depending on the chosen dimension, there may be many levels to the dimension which when displayed will show different combinations of the data.

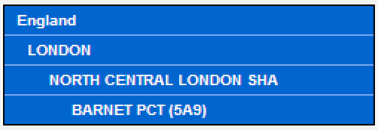


Figure 31 – Hierarchical Display 4 levels

Hierarchic display options dictate how a dimension is displayed within a Report. The Hierarchic display options are accessed from the Pop-up menu.

1. Click a **Column/Row Heading** to display the Pop-up menu.
2. Click the **Hierarchic Options** label.

   At the top of the dialog box you will see what Dimension and Current member are active. The illustration below shows that the currently active dimension is [Commissioners] and the Current Member is [Commissioners].&[England].

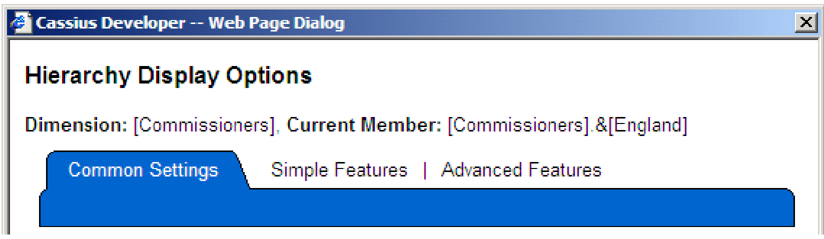


Figure 32 – Hierarchy Display – Active Dimension/Current Member

   The icons displayed within the dialog box are explained overleaf. The examples relate to the above settings.

3. Click any of the **Common Settings**.
4. Deselect the **Include Current Member in Hierarchy** option if the Current Member is not required in the output.
5. Click the **OK** button to apply.

Displays all nodes at the first level of the hierarchy.

- LONDON
- MIDLANDS
- NORTH
- SOUTH
- Unknown Region

Displays all nodes at the second level of the hierarchy.

- NORTH CENTRAL LONDON SHA
- NORTH EAST LONDON SHA
- NORTH WEST LONDON SHA
- SOUTH EAST LONDON SHA
- SOUTH WEST LONDON SHA
- BEDFORDSHIRE AND HERTFORDSHIRE SHA
- BIRMINGHAM AND THE BLACK COUNTRY SHA
- ESSEX SHA
- LEICESTERSHIRE, NORTHAMPTONSHIRE AND RUTLAND SHA
- NORFOLK, SUFFOLK AND CAMBRIDGESHIRE SHA

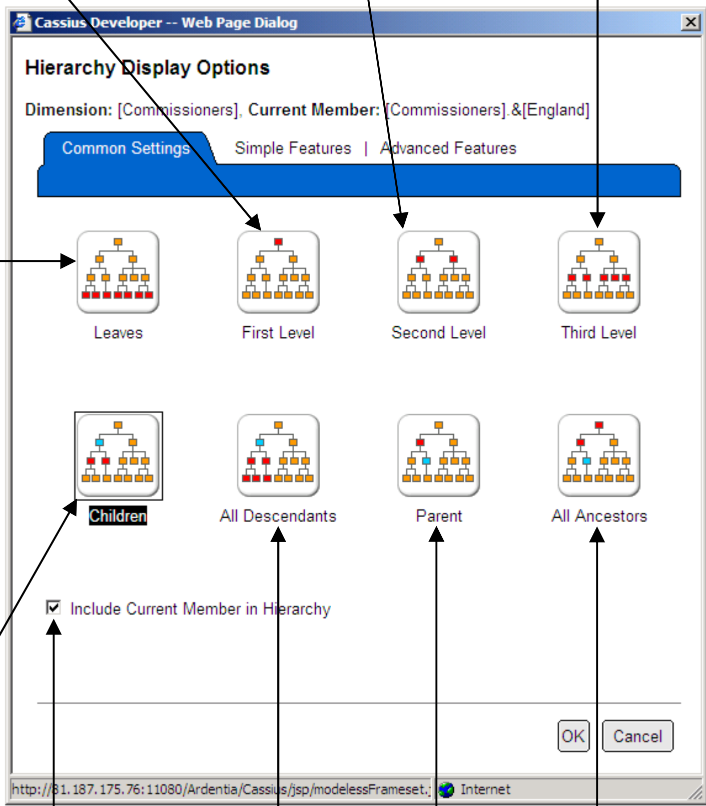
Displays all nodes at the third level of the hierarchy.

- BARNET PCT (5A9)
- CAMDEN AND ISLINGTON CARE TRUST (TAF)
- CAMDEN PCT (5K7)
- ENFIELD PCT (5C1)
- HARINGEY PCT (5C9)
- ISLINGTON PCT (5K8)
- BARKING AND DAGENHAM PCT (5C2)

Displays all the nodes at the bottom level of the hierarchy; these are the “Leaves” of the tree structure.

Note: If a data structure has a limited number of levels Leaves may produce a result similar to other choices.

- BARNET PCT (5A9)
- CAMDEN AND ISLINGTON CARE TRUST (TAF)
- CAMDEN PCT (5K7)
- ENFIELD PCT (5C1)
- HARINGEY PCT (5C9)
- ISLINGTON PCT (5K8)
- BARKING AND DAGENHAM PCT (5C2)



This is the Default Setting (with a ✓ in Include Current Member in Hierarchy checkbox).

It displays the current member and its children.

- England
- LONDON
- MIDLANDS
- NORTH
- SOUTH
- Unknown Region

Displays all nodes underneath the current node.

- England
- LONDON
- NORTH CENTRAL LONDON SHA
- BARNET PCT (5A9)
- CAMDEN AND ISLINGTON CARE TRUST (TAF)

Displays all nodes above the current node.

- England

Displays the parent of the current node.

- England

✓ in Include Current Member in Hierarchy.

Removes current member from the display thus only showing children.

14.2 To use a 'Simple Features' Hierarchic Display within a NetInform Analysis

1. Click a **Column/Row Heading** to display the Pop-up menu.
2. Click the **Hierarchic Options** label.
3. Click the **Simple Features** tab to define your own basic hierarchy.
4. Click the **Fixed Hierarchy Display** radio button to turn off hierarchic display options, i.e. it includes all members of a single member level.

   This then enables the **SHOW** drop down.
5. Use the **SHOW** drop down to select how you want to fix the hierarchy.

   Choosing **Selected Level** enables the Level drop down.
6. Click and select the **LEVEL** drop down to fix the Dimension level to display.
7. Click the **Contextual Hierarchy Display** radio button if the hierarchy is to be based on the label you selected.
8. Click the **Ancestors** checkbox if ancestors are required in your output and select an option from the drop down list.
9. Click the **Descendants** checkbox if descendants are required in your output and select an option from the drop down list.
10. Click the **Show Current Member** checkbox to include the current member.
11. Click the **Show Siblings** checkbox to include the current member's siblings.
12. Click the **OK** button to apply.

14.3 To use an 'Advanced Features' Hierarchic Display within a NetInform Analysis

1. Click a **Column/Row Heading** to display the Pop-up menu.
2. Click the **Hierarchic Options** label.
3. Click the **Advanced Features** tab to define your own complex hierarchy.

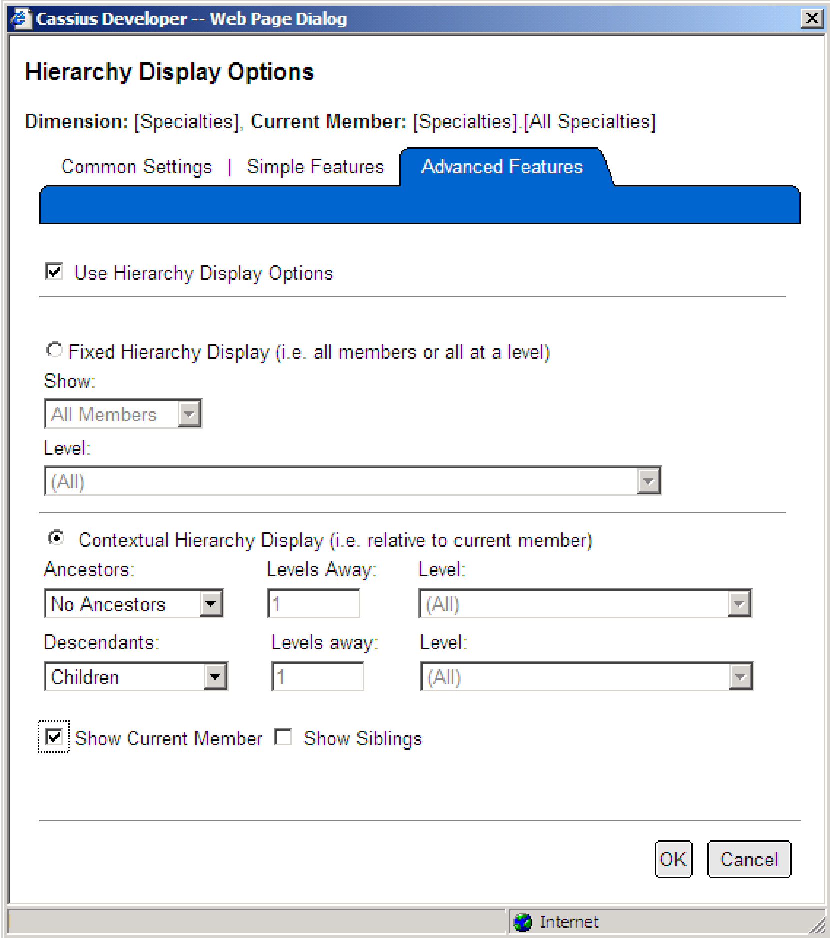


Figure 33 – Hierarchy Display Options – Advanced Features

4. Click the **Use Hierarchy Display Options** checkbox to turn on/off hierarchic display options.
5. Click the **Fixed Hierarchy Display** radio button (it is only enabled when you have deselected the Use Hierarchy Display Options) i.e. it includes all members of a single member level and enables the **SHOW** field.
6. Use the **SHOW** drop down to select how you want to fix the hierarchy. Choosing '**Selected Level**' enables the **LEVEL** drop down.
7. Use the **LEVEL** field to fix the dimension level to display.
8. Click the **Contextual Hierarchy Display** radio button if the hierarchy is to be based on the label you selected.
9. Click the **Ancestors** drop down if required in your output and choose an option from the drop down list.

   Choosing '**Selected Level**' enables the **LEVEL** drop down. Choosing '**Levels Away**' enables the **LEVELS AWAY** drop down.
10. Select the required number of **Levels Away** from (above) the selected member.

11. Select the required **Level**. A list of dimension level names is displayed.
12. Click the **Descendants** drop down if descendants are required in your output and choose an option from the drop down list.

    Choosing '**Selected Level**' enables the **LEVEL** drop down. Choosing '**Levels Away**' enables the **LEVELS AWAY** drop down.
13. Select the required number of **Levels Away** from (below) the selected member.
14. Select the required **Level**. A list of dimension level names is displayed.
15. Click the **Show Current Member** checkbox to include the current member.
16. Click the **Show Siblings** checkbox to include the current selections siblings.
17. Click the **OK** button to apply.

14.4 To remove Hierarchy Display Options

1. Click the **Column Heading** to display the Pop-up menu.
2. Deselect the **Hierarchic Options** checkbox.

   You may be presented with a warning message as follows:

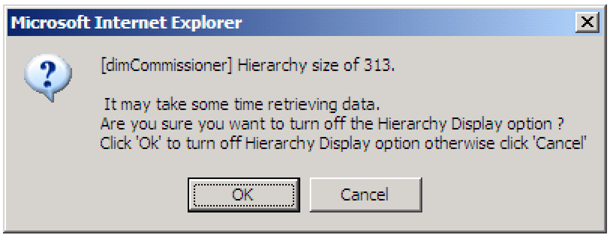


Figure 34 – Hierarchy Display Options – Warning Message

3. Respond as appropriate.

15 Work with Pop-up Menus - Custom Dimensions

Through the use of Custom Dimensions you are able to customise and analyse particular dimension members of interest to you. Examples would include a custom dimension that allows the comparison of data for a number of teaching hospitals, or a number of specific PCTs across a cluster.

Static Dimensions

Custom Dimensions that are based on a fixed subset of members are known as "Static Dimensions". The values included in "Static Dimensions" are constant and not altered by the report context. Static Dimensions are applied from the "Custom" label on the Pop-up menu.

System or User Defined Dimensions

Static Dimensions can be either "System" or "User defined".

As a standard user you are only able to create "User defined" dimensions.

"System defined" dimensions are created and amended for you by developers and cannot be altered by standard users.

15.1 To manage Static Custom Dimensions

1. Click a **table or chart** label to open the Pop-up menu.

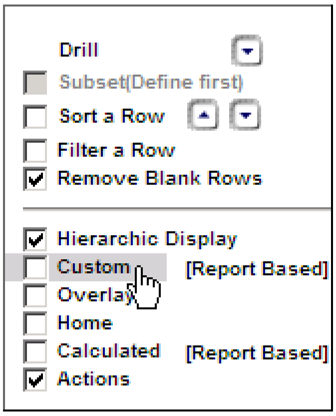


Figure 35 – Creating Static Custom Dimensions

2. Click **Custom**.

   The **Custom Dimension Static** dialog box appears. This allows you to create, maintain, delete, select and manage your static dimensions.

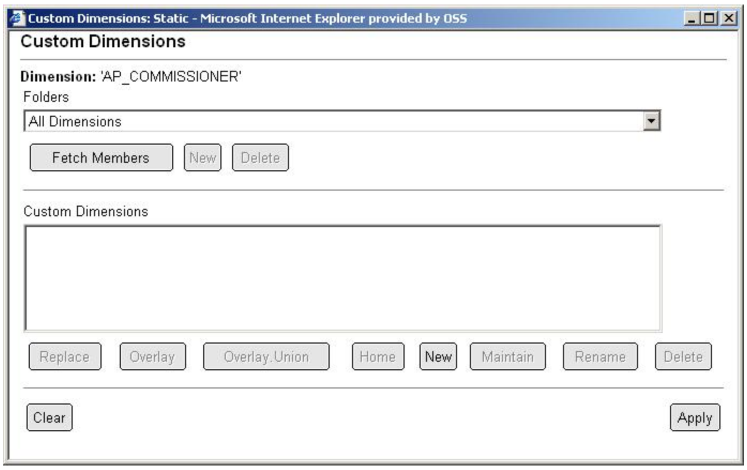


Figure 36 – Example of a Custom "Static" Dimension dialog box

The Dialog Box explained

Folders	Provides a drop down list of folders containing custom dimensions for the selected dimension member.
Fetch Members	Refreshes the Custom Dimensions list and shows those available.
New	Creates a new folder for storing your custom dimensions. This option is only available to developers.
Delete	Removes the selected custom dimension folder. This option is only available to developers.
Custom Dimensions	This area displays a list of the custom dimensions held in the selected folder.
Replace	Substitutes the current report dimension with the static custom of your choice.
Overlay	Highlights specific members and colour codes the header so you can see those of specific relevance to you.
Overlay Union	Adds the members of your selected custom dimension to the table. The members are appended and highlighted with colour coded headers.
Home	Use if you wish to identify members from a custom dimension as a 'home' dimension member. Often a custom dimension that is selected, as the 'Home' custom dimension, will contain a single member e.g. your home organisation.
New	Displays the custom dimension maintenance dialog box.
Maintain	Displays the custom dimension maintenance dialog box with selected dimension details to edit.
Rename	Provides the ability to alter the custom dimension name.
Delete	Removes a custom dimension.
Apply	Sets all changes and edits.
Clear	Removes all the applied highlights (custom dimensions) within the dialog box.

15.2 To create a Static Custom Dimension

1. Click the **New** button - which will give you a blank maintenance screen.

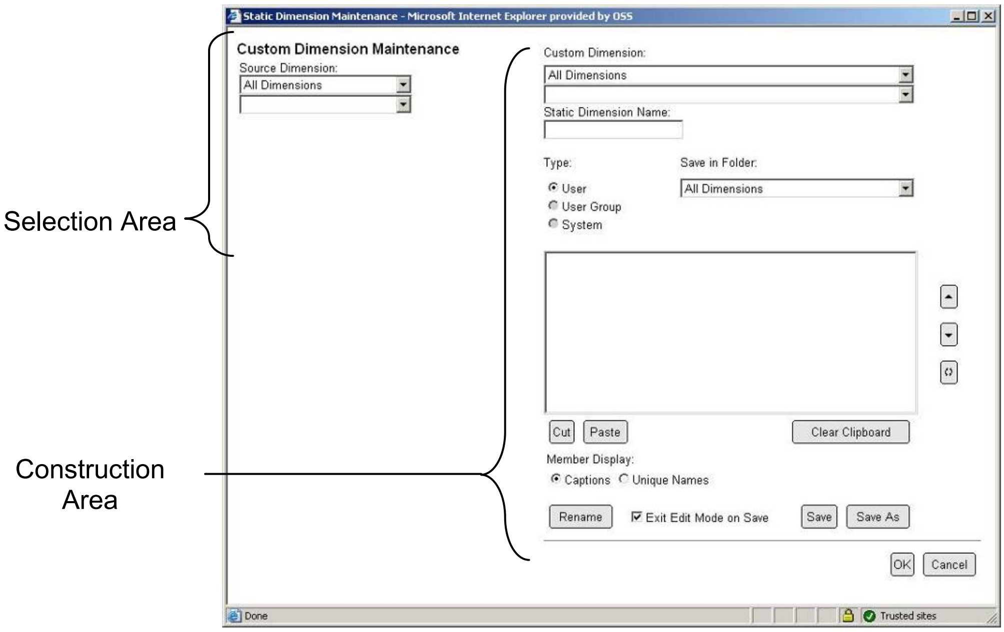


Figure 37 – Custom Dimension Maintenance dialog

2. Select your **Source Dimension** from the two drop down boxes as the basis for your custom dimension.

The 1st drop down lists the folders already defined for the selected base dimension.

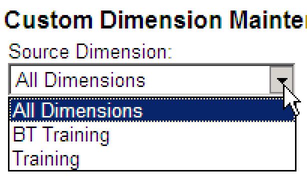


Figure 38 – Base Dimensions Folders

The 2nd drop down lists the custom dimensions in the selected folder with the base dimension.

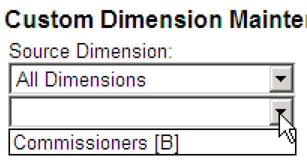


Figure 39 – Available Dimensions

The displayed list of dimensions will have a single letter code denoting their origin as follows:

- **[B]** = Base dimension
- **[S]** = System defined custom dimension
- **[U]** = User defined custom dimension

3. Select a dimension to display and navigate a members list in a tree structure.

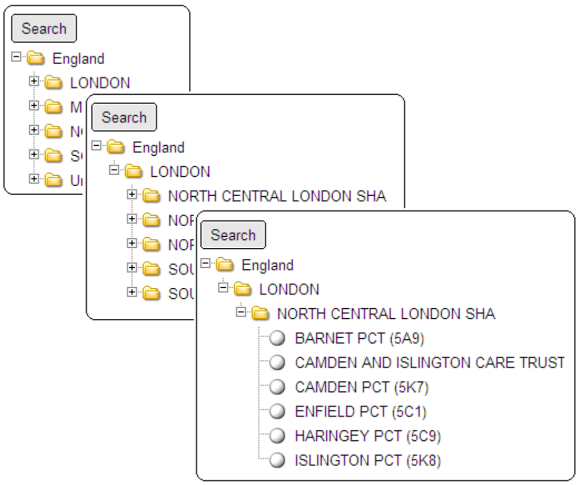


Figure 40 – Available Dimension Members

4. Navigate and select the **member** button or **folder** icon for the members to include in your static dimension. Selected members will be added to the selected members list on the right hand side of the screen.

   Note: The member selection order defines the initial order within the right hand list. This can be adjusted.

5. Enter a name for your new static dimension in the **STATIC DIMENSION NAME** field.

6. Select an appropriate destination folder from the **Save in Folder** drop down list.

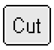
7. Select the dimension **Type** for your custom dimension; User, User Group or System. If you are a standard user the **User** radio button will have been set as **default**.

8. Manipulate the **Selected Member List** into the order required.


Moves selected members up the member list.


Moves selected members down the member list.


Reverses the order of the selected members.



Cuts the selected members from the list into the clipboard.

Pastes the cut members above the highlighted member.

Deletes the content of the clipboard.

9. Click the **Unique Names** radio button if you wish to change the default selection of **Caption** for **Member Display**.

10. Use the **Rename** button if you wish to alter the name of the currently selected dimension.

11. Click **Save** to store the current custom dimension definition.

    If **Exit Edit Mode on Save** is checked you will be returned to the previous dialog box.

12. Click **Save As** to store the current custom dimension definition with a new name.
13. Type in a new name and click the **OK** button to complete.
14. If not checked, click the **Exit Edit Mode on Save** checkbox to save the custom dimension by default rather than having to click the **Save** button.
15. Click the **OK** button to apply.

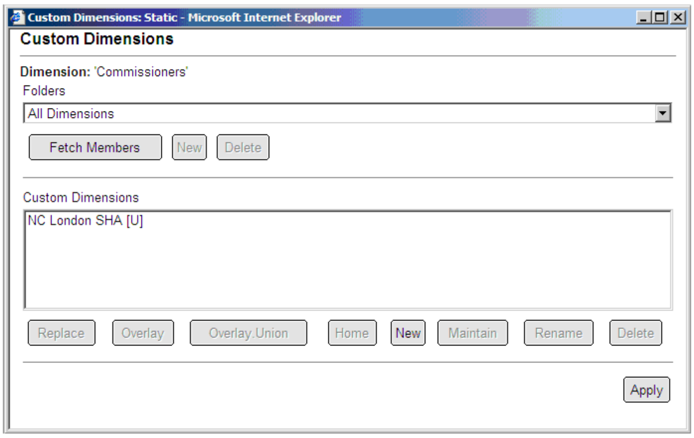


Figure 41 – Newly Created Static Dimension

15.3 To understand the process of using a Static Custom Dimension

In order to understand the process of using a Static Custom Dimension a scenario will be used to explain the concepts.

A. An individual wants to look and compare data for the six PCTs within the North Central London SHA.

To complete this comparison a static custom dimension is required that contains All PCTs in the North Central London SHA.

It is called **NC London SHA [U]** and will **Replace** the existing displayed data.

B. They wish to highlight the Enfield and Haringey PCTs within the group for comparison.

To highlight additional PCTs two static custom dimensions are needed. One contains only Enfield PCT and the other contains only Haringey PCT.

They are called **Enfield PCT [U]** and **Haringey PCT [U]**.

One will be applied as **Home** and one will **Overlay** the displayed data.

C. Additionally they wish to compare the Enfield PCT against three other PCTs from around England (South Gloucestershire, East Leeds and Solihull).

To make this comparison a static dimension is necessary that contains the stated other PCTs.

This dimension is called **Sample PCTs North Mids South [U]** and will be applied as an **Overlay Union** appending to the displayed data.

The starting point in this scenario (illustrated in the next figure) is to create the four Static Custom Dimensions:

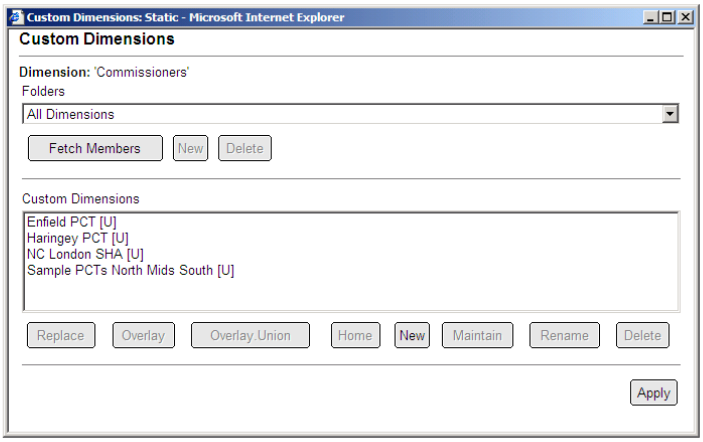


Figure 42 – Newly Created Static Dimension

15.4 To Replace with a Custom Dimension

1. Click a **Column/Row Heading** to open the Pop-up menu.
2. Click the **Custom** label.
3. Select the **Custom Dimension** to be applied (NC London SHA).
4. Click the **Replace** button.

   The selected custom dimension name will change to colour coding that will be displayed in the report.

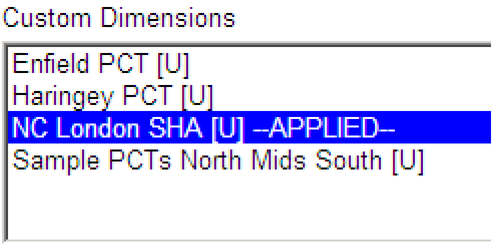


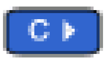
Figure 43 – Replace Static Custom Dimension

5. Click the **Apply** button to commit the change.

   The table displayed will change to show the result of replacing the original dimension with the one selected.

C	Medical Specialties	Mental Health	Obstetrics And Gynaecology	Other	Radiology and Pathology	Surgical Specialties	Unknown
BARNET PCT (5A9)	355,749	5,102	104,633	1,838	44,412	461,396	27,643
CAMDEN AND ISLINGTON CARE TRUST (TAF)	1					6	
CAMDEN PCT (5K7)	232,106	16,374	72,028	4,459	20,742	211,456	5,030
ENFIELD PCT (5C1)	204,527	10,676	59,239	2,219	57,957	266,578	2,895
HARINGEY PCT (5C9)	327,998	25,986	154,852	4,658	47,119	350,990	7,541
ISLINGTON PCT (5K8)	247,243	13,677	109,604	8,130	19,059	240,669	4,052

Figure 44 – Static Custom Dimension applied to rows



When a custom dimension has been applied through using **Replace**, an image is displayed in the top left corner of the table. The direction of the arrow signifies if the custom dimension has been applied to a row or column.

15.5 To set a Home Custom Dimension

In order to highlight a dimension within the existing dimension headings you set that as the **Home** dimension.

1. Click a **Column/Row Heading** to open the Pop-up menu.
2. Click the **Home** label.

   Note: Custom takes you to the same place.
3. Select the **Custom Dimension** to be applied (Enfield PCT).
4. Click the **Home** button.

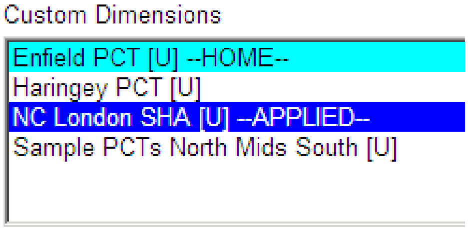


Figure 45 – Replace and Home Static Custom Dimensions

5. Click the **Apply** button to commit the change.

   The table displayed will change to show the result of applying the selected dimension as **Home**, the selected dimension is highlighted in light blue.

C	Medical Specialties	Mental Health	Obstetrics And Gynaecology	Other	Radiology and Pathology	Surgical Specialties	Unknown
BARNET PCT (5A9)	355,749	5,102	104,633	1,838	44,412	461,396	27,643
CAMDEN AND ISLINGTON CARE TRUST (TAF)	1					6	
CAMDEN PCT (5K7)	232,106	16,374	72,028	4,459	20,742	211,456	5,030
ENFIELD PCT (5C1)	204,527	10,676	59,239	2,219	57,957	266,578	2,895
HARINGEY PCT (5C9)	327,998	25,986	154,852	4,658	47,119	350,990	7,541
ISLINGTON PCT (5K8)	247,243	13,677	109,604	8,130	19,059	240,669	4,052

Figure 46 – Replaced and Home Static Custom applied to rows

15.6 To Overlay a Custom Dimension

In order to highlight a second dimension within the existing dimension headings you set an **Overlay** dimension.

1. Click a **Column/Row Heading** to open the Pop-up menu.
2. Click the **Overlay** label.

   Note: Custom takes you to the same place.
3. Select the **Custom Dimension** to be applied (Haringey PCT).
4. Click the **Overlay** button.

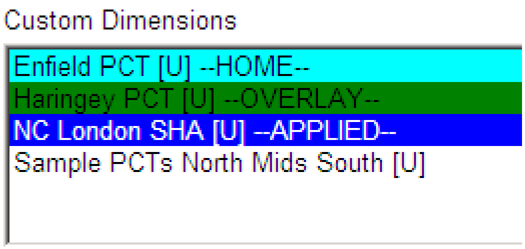


Figure 47 – Overlay Static Custom Dimensions

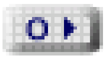
5. Click the **Apply** button to commit the change.

The table displayed will change to show the result of applying the selected dimension as an **Overlay**, in that the selected dimension is highlighted in red.

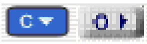
If dimensions have been applied as both **Home** and **Overlay** then two colours are used to highlight the headers.

C O	Medical Specialties	Mental Health	Obstetrics And Gynaecology	Other	Radiology and Pathology	Surgical Specialties	Unknown
BARNET PCT (5A9)	355,749	5,102	104,633	1,838	44,412	461,396	27,643
CAMDEN AND ISLINGTON CARE TRUST (TAF)	1					6	
CAMDEN PCT (5K7)	232,106	16,374	72,028	4,459	20,742	211,456	5,030
ENFIELD PCT (5C1)	204,527	10,676	59,239	2,219	57,957	266,578	2,895
HARINGEY PCT (5C9)	327,998	25,986	154,852	4,658	47,119	350,990	7,541
ISLINGTON PCT (5K8)	247,243	13,677	109,604	8,130	19,059	240,669	4,052

Figure 48 – Home and Overlay Static Custom Dimensions



When an **Overlay** has been applied an image is displayed in the top left corner of the table. The direction of the arrow signifies if the custom dimension has been applied to a row or column.



If dimensions have been applied as both **Home** and **Overlay** then two symbols are displayed.

15.7 To apply an Overlay Union with Custom Dimensions

In order to add another dimension with extra members to a report set it as an **Overlay Union** dimension.

1. Click a **Column/Row Heading** to open the Pop-up menu.
2. Click the **Overlay** label.

<u>Note</u>: Custom takes you to the same place.

3. Select the **Custom Dimension** to be applied (Sample PCTs North Mids South).
4. Click the **Overlay Union** button.

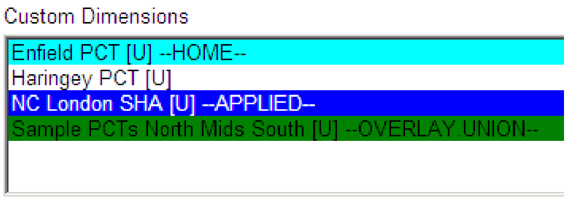
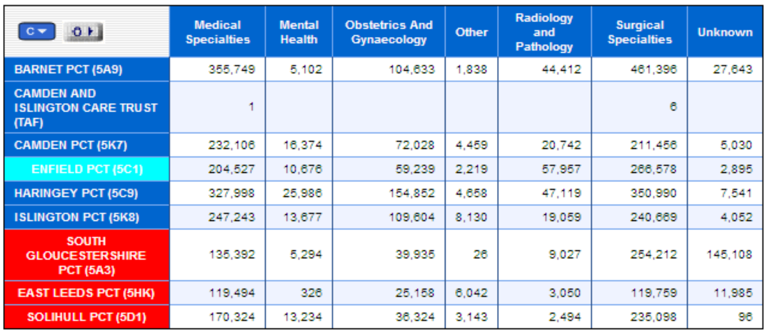


Figure 49 – Overlay Union Static Custom Dimensions

5. Click the **Apply** button to commit the change.

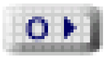
The table displayed will change to show the result of applying the selected dimension as an **Overlay Union**, in that the selected dimension is added to the report and is highlighted in red.

If dimensions have been applied as both **Home** and **Overlay Union** then two colours are used to highlight the headers.



C O	Medical Specialties	Mental Health	Obstetrics And Gynaecology	Other	Radiology and Pathology	Surgical Specialties	Unknown
BARNET PCT (5A9)	355,749	5,102	104,633	1,838	44,412	461,396	27,643
CAMDEN AND ISLINGTON CARE TRUST (TAF)	1					6	
CAMDEN PCT (5K7)	232,106	16,374	72,028	4,459	20,742	211,456	5,030
ENFIELD PCT (5C1)	204,527	10,676	59,239	2,219	57,957	266,578	2,895
HARINGEY PCT (5C9)	327,998	25,986	154,852	4,658	47,119	350,990	7,541
ISLINGTON PCT (5K8)	247,243	13,677	109,604	8,130	19,059	240,669	4,052
SOUTH GLOUCESTERSHIRE PCT (5A3)	135,392	5,294	39,935	26	9,027	254,212	145,108
EAST LEEDS PCT (5HK)	119,494	326	25,158	6,042	3,050	119,759	11,985
SOLIHULL PCT (5D1)	170,324	13,234	36,324	3,143	2,494	235,098	96

Figure 50 – Static Custom Dimensions Applied to rows



When an **Overlay Union** has been applied an image is displayed in the top left corner of the table. The direction of the arrow signifies if the custom dimension has been applied to a row or column.

15.8 To apply Custom Dimensions within a Chart

1. Select the chart.
2. Select the **Data View** button to view the underlying table.

   Perform the same processes as for tables.
3. Select the **Chart View** button to view the chart based upon your changes.

15.9 To remove or alter Static Custom Dimensions

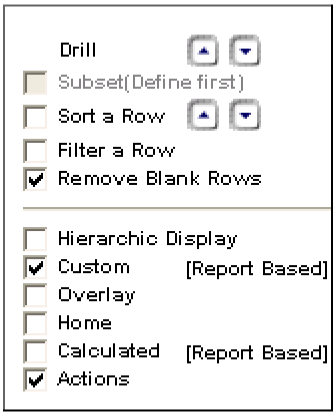


Figure 51 – Pop-up menu showing Custom Dimension applied

1. Activate the Pop-up menu.
2. Deselect one or all of the **Custom**, **Overlay** or **Home** checkboxes to clear static custom dimensions.
3. To alter the custom dimension settings, click the **Custom**, **Overlay** or **Home** labels.

16 Work with Pop-up Menus - Calculations

Reports often benefit from having calculated values added (to rows or columns) in order to clarify the result. A set of common statistical functions exist within the SUS/PbR toolkit for selection from a Pop-up. The set of available functions are:

- Average
- Count excluding empty
- Count including empty
- Max
- Median
- Mode excluding empty
- Mode including empty
- Standard deviation
- Sum
- Variance

16.1 To add a Report Based Calculation

1. Click a **Column/Row Heading** to display the Pop-up menu.
2. Click the **Report Based** calculations label.

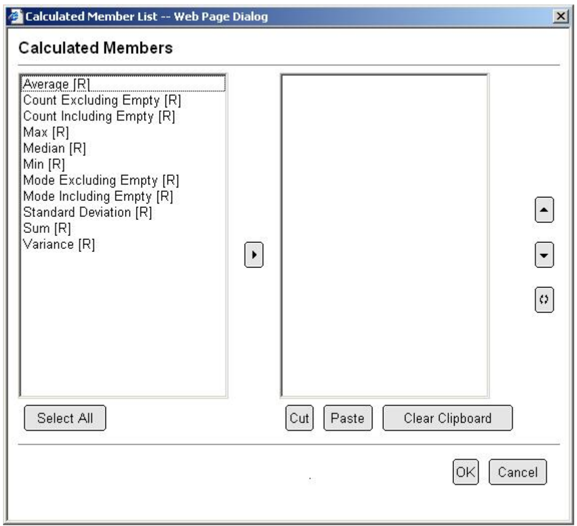


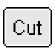
Figure 52 – Selecting a Function

3. Select a required function.
4. Click the **Move Right** button.
5. Repeat steps 3 to 4 for all required functions.
6. Use any of the following buttons to alter the function output.

 Moves selected function up the order list.

 Moves selected function down the order list.

 Reverses the order of the selected functions.



Cuts the selected function from the list into the clipboard.

Pastes the cut function above the highlighted function.

Deletes the content of the clipboard.

7. Click the **OK** button to complete.

   The chosen functions will appear in the order specified highlighted with a yellow background.

	Medical Specialties	Mental Health	Obstetrics And Gynaecology
LONDON	6,230,678	260,694	1,840,905
MIDLANDS	10,761,472	954,486	2,880,262
NORTH	10,862,364	1,064,630	3,150,325
SOUTH	7,396,706	880,034	1,896,814
Unknown Region	14,021,790	1,506,033	4,030,591
Average	9,854,602.00	933,175.40	2,759,779.40
Max	14,021,790.00	1,506,033.00	4,030,591.00
Min	6,230,678.00	260,694.00	1,840,905.00

Figure 53 – Example [Report Based] Calculations on a table

16.2 To remove Calculations

1. Click a **Column/Row Heading** to display the Pop-up menu.
2. Deselect the **Calculated** checkbox.

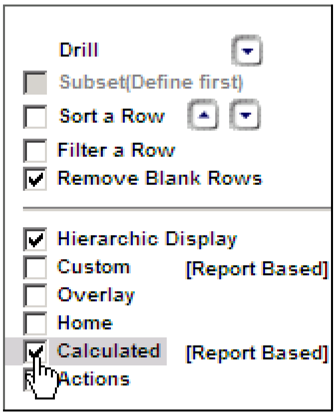


Figure 54 – Removing [Report Based] Calculations

16.3 To add custom Calculations using the Calculated label to the analysis

In addition to the set of common statistical functions available within the SUS/PbR toolkit for selection, you are able to create your own user defined functions.

For example it may be useful to create a user function to calculate the figures for "Surgical Specialties" as a percentage of "All Specialties".

	Medical Specialties	Mental Health	Obstetrics And Gynaecology	Other	Radiology and Pathology	Surgical Specialties	Unknown
LONDON	6,230,678	260,694	1,840,905	116,597	680,474	7,159,022	328,658
MIDLANDS	10,761,472	954,486	2,880,262	144,722	719,072	15,386,027	366,652
NORTH	10,862,364	1,064,630	3,150,325	134,745	1,082,565	15,358,592	511,733
SOUTH	7,396,706	880,034	1,896,814	132,112	724,688	11,990,651	2,429,130
Unknown Region	14,021,790	1,506,033	4,030,591	146,692	1,277,487	18,457,912	1,442,582

Figure 55 – Sample Data

1. Click a **Column/Row Heading** to display the Pop-up menu.
2. Select the **Calculated** label**.**

The **Calculated Set Selection** dialog box is displayed.

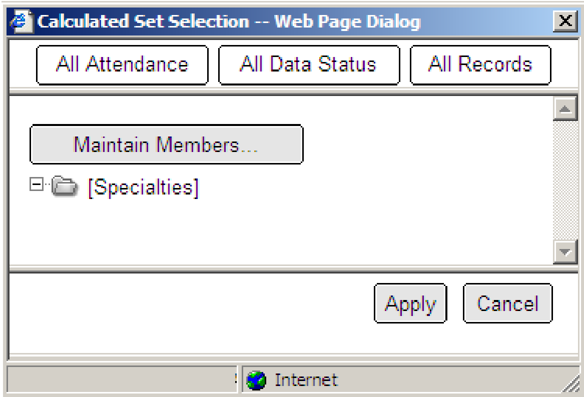


Figure 56 – Calculated Set Selection dialog box

3. Click the **Maintain Members** button to open the Calculated Members Maintenance dialog box.

   All available functions are listed at the left of the dialog box.

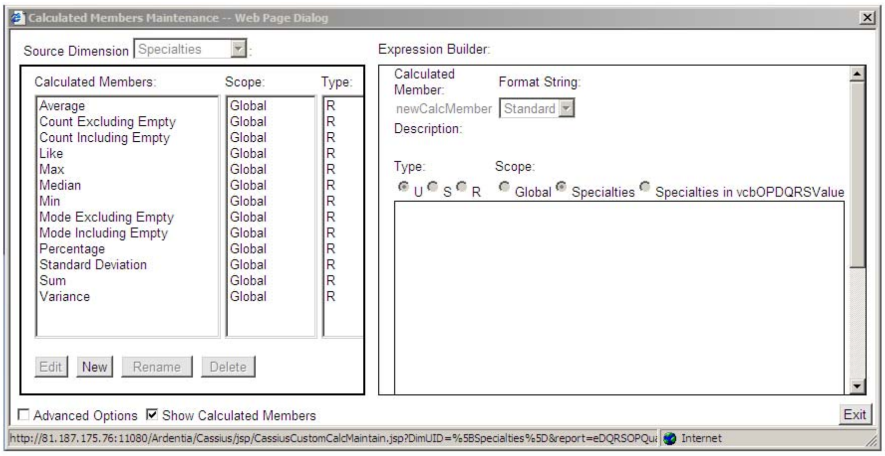


Figure 57 – Calculated Members Maintenance dialog box

4. Click the **New** button to create a new user defined function and enter a name in the dialog box.

   The name you give should be meaningful as it is used to identify the function within the function list.

5. Click the **New** button to move to the next stage in the process.

   You are returned to the previous dialog box and are able to construct a function. The dialog box is split in to two with the **Dimension List** on the left and the **Expression Builder** on the right.

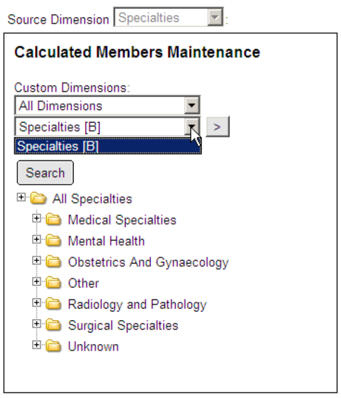


Figure 58 – Source Dimension List

6. Make use of the Source Dimension list to navigate and select appropriate members for inclusion within the new user defined function.

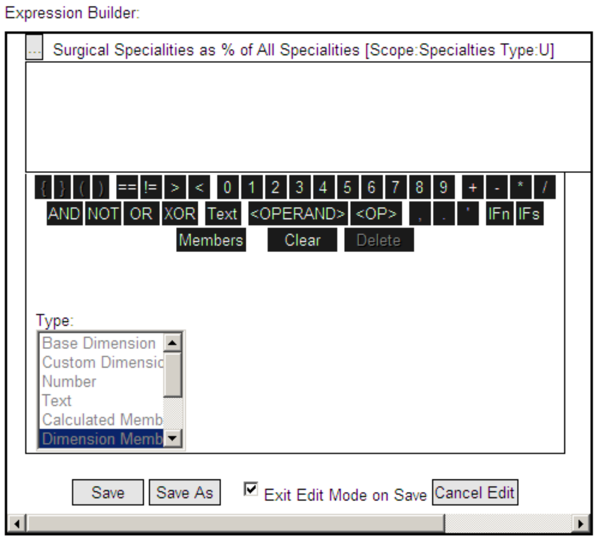


Figure 59 – Calculated Member Maintenance Expression Builder

7. The user defined function is constructed within the expression builder by selecting appropriate dimension members and operators from the buttons provided.

To provide a function to calculate Surgical Specialty as a percentage of All Specialties the expression in Figure 59 was created.*

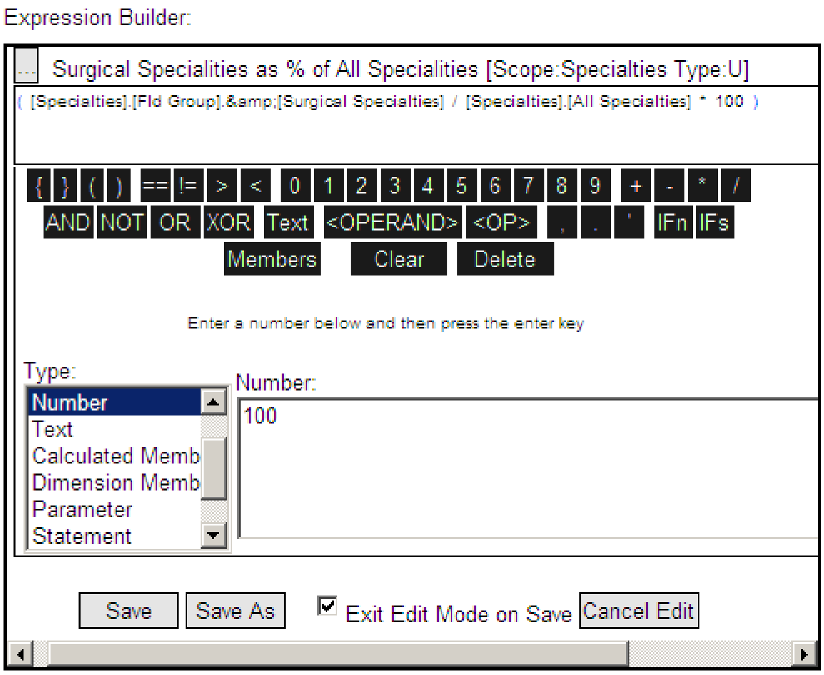


Figure 60 – Expression Builder with Expression

8. Click the **Save** button to complete the creation process and add the new user defined function to the list.

* For further information regarding this dialog box refer to the Ardentia PDF User Guide.

Figure 61 – Save Confirmation dialog

9. Click the **OK** button to continue.

   The **Calculated Members** list is displayed and now includes the new user defined function.

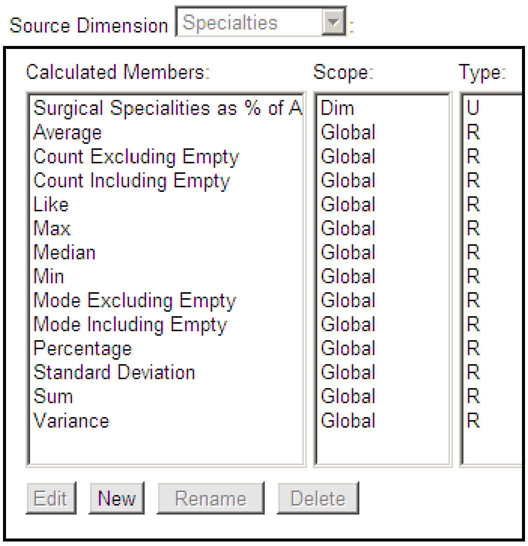


Figure 62 – Calculated Members List with new member

10. Click the **Exit** button to close the dialog box.

11. Click the **Apply** or **Cancel** button to close the remaining dialog box.

    The function is applied as previously discussed using the **Pop-up** menu and **[Report Based]** calculations option.

	All Specialties	Medical Specialties	Mental Health	Obstetrics And Gynaecology	Other	Radiology and Pathology	Surgical Specialties	Unknown	Surgical Specialities as % of All Specialities
England	146,327,897	49,273,010	4,665,877	13,798,897	674,868	4,484,286	68,352,204	5,078,755	46.71
LONDON	16,617,028	6,230,678	260,694	1,840,905	116,597	680,474	7,159,022	328,658	43.08
MIDLANDS	31,212,693	10,761,472	954,486	2,880,262	144,722	719,072	15,386,027	366,652	49.29
NORTH	32,164,954	10,862,364	1,064,630	3,150,325	134,745	1,082,565	15,358,592	511,733	47.75
SOUTH	25,450,135	7,396,706	880,034	1,896,814	132,112	724,688	11,990,651	2,429,130	47.11
Unknown Region	40,883,087	14,021,790	1,506,033	4,030,591	146,692	1,277,487	18,457,912	1,442,582	45.15

Figure 63 – User Defined Calculated function applied

17 Work with Pop-up Menus - Actions

17.1 Identifying data through Actions

The SUS Toolkit has the functionality to shade data cells based upon its values. This functionality known as Actions is very similar to the Microsoft Excel Conditional Formatting feature and is often referred to as "Traffic Lighting".

It is possible to define a set of rules that influence the colour of cells returned from a query. It is used to highlight where values:

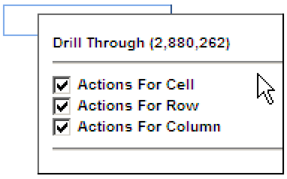
- Exceed or meet a particular value.
- Fall within or out of a particular range of values.
- Are less than a particular value

In addition functionality exists to allow the linking of either reports or web/intranet addresses from within Pop-up menus when you select conditionally formatted cells.

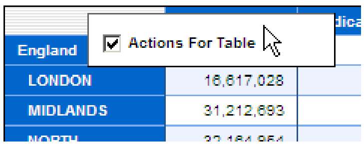
These links are referred to as Actions and are constructed through rules. Some Actions are "default rules" that exist as part of the defined report. You can remove or overwrite these as required and also define your own.

17.1.1 To create a New Action

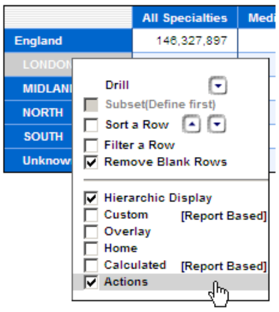
1. Open the report to create actions for.
2. Open a Pop-up by selecting either:



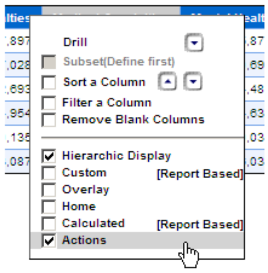
Cell



Table



Row Header



Column Header

17.2 To create an Action Rule for a table

1. Select the top left corner of the table to open the table Pop-up.
2. Select **Actions for Table**.
3. Click the **Create New** button.
4. Enter the rule name in the **NAME** field. The name should relate to the rule being created.
5. Select the **Use Current Context** checkbox if the action is to be applied to the context currently defined for the report.

Or

Select the appropriate **Select** checkboxes for the contexts to apply the action against.

6. Select the appropriate **Cascade** checkbox if the action is to be applied to data further down the hierarchy.
7. Click the **Conditions** tab to create a rule.
8. Click the **Highlight Colour** button and select the colour of your choice from the **Colour Picker**.

9. Set your condition.
10. Click the **Create** button to save the action.
11. Click the **Apply** button to use the action.

17.3 To create a single rule for a column or row

1. Select the header for the row or column that the rule is to be applied to.
2. Select **Actions** from the **Pop-up** menu.
3. Click the **Create New** button.

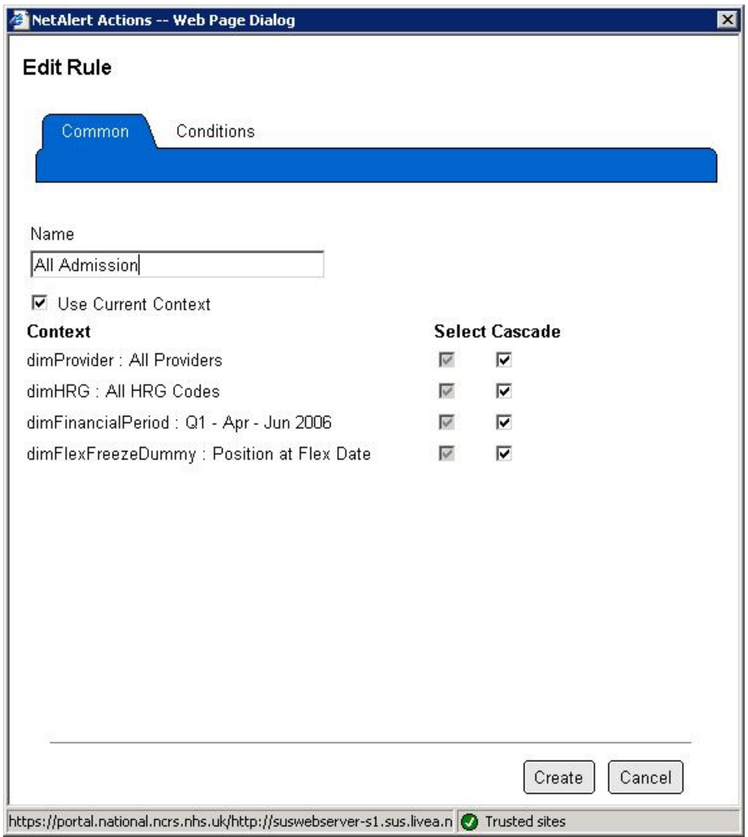


Figure 64 – "Edit Rule", Common tab

4. Enter the rule name in the **NAME** field. The name should relate to the rule being created.
5. Select the **Use Current Context** checkbox if the action is to be applied to the context currently defined for the report.

Or

Select the appropriate **SELECT** checkboxes for the contexts to apply the action against.

6. Select the appropriate **Cascade** checkbox if the action is to be applied to data further down the hierarchy.

7. Click the **Conditions** tab to define the rule.

   The Conditions tab defaults to apply the rule to the area of the report you initially selected for example "Entire column" or "Entire row".

8. Click the **Change** button (if required) to specify an alternative area of the report that the rule you are defining applies to.

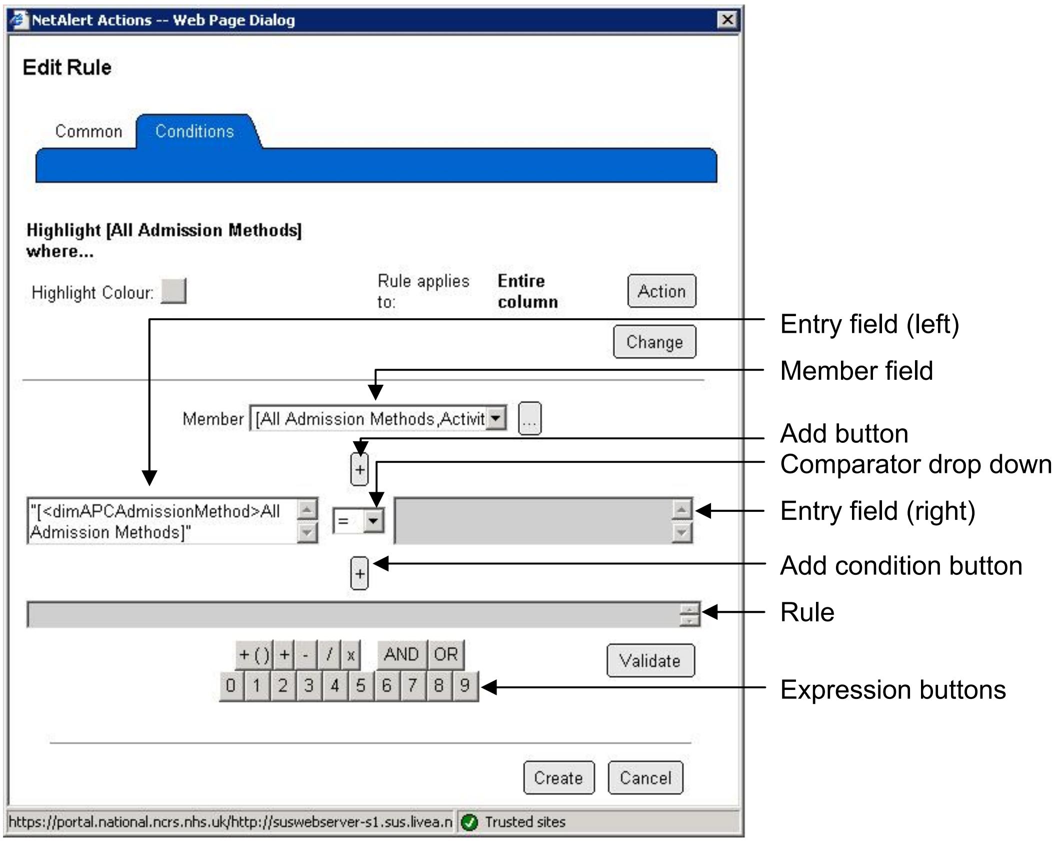


Figure 65 – Edit Rule, Conditions tab

9. Click the **Highlight Colour** button to activate the colour picker and select the colour to be used to highlight the cells that meet the defined criteria.

10. Click the **Action** button to define additional options that will be available from the Pop-up menu displayed when a user clicks on a cell highlighted by the rule. *See To define a Pop-up Menu Link Action on page 68*.

11. Click in the **ENTRY** field to the left of the comparator drop down list to define the left side of the expression.

12. Either type a value directly into this field.

    Or

    Select one from the **MEMBER** field and click the **Add** button below the list.

13. Select a **Comparator** from the drop down list.

14. Click in the **ENTRY** field to the right of the comparator field to activate.

15. Either type a value directly into this field.

    Or

    Select one from the **MEMBER** field and click the **Add** button (below the list).

16. Click the **AND**/**OR** operators to separate the expressions.
17. Click the **Validate** button to ensure that the created rule works. It is important you validate the rule as invalid rules cannot be saved.
18. Click the **Create** button to save the action and contained rules.

    The rule is listed in the **Select Rule to Edit** screen.

Figure 66 – Select Rule to Edit screen, 1 rule

19. Click the **Apply** button to use the action.

17.4 To create multiple rules for columns or rows

You may wish to display figures that meet different criteria's in differing colours. For example figures over the value of 3,000,000 could be coloured green, figures under the value of 500,000 could be red and figures between 1,000,000 and 2,000,000 could be coloured orange. To apply colour formatting in such a way 3 rules would need to be created.

Each rule would be defined as stated previously in the "To create a single rule for a column or row" section following steps 1 to 18.

The figure below is a representation of what you would see if three rules were created; they would list with their Name displayed. It is advisable to provide each rule with an appropriate name to make it easier to identify which rule to select when editing.

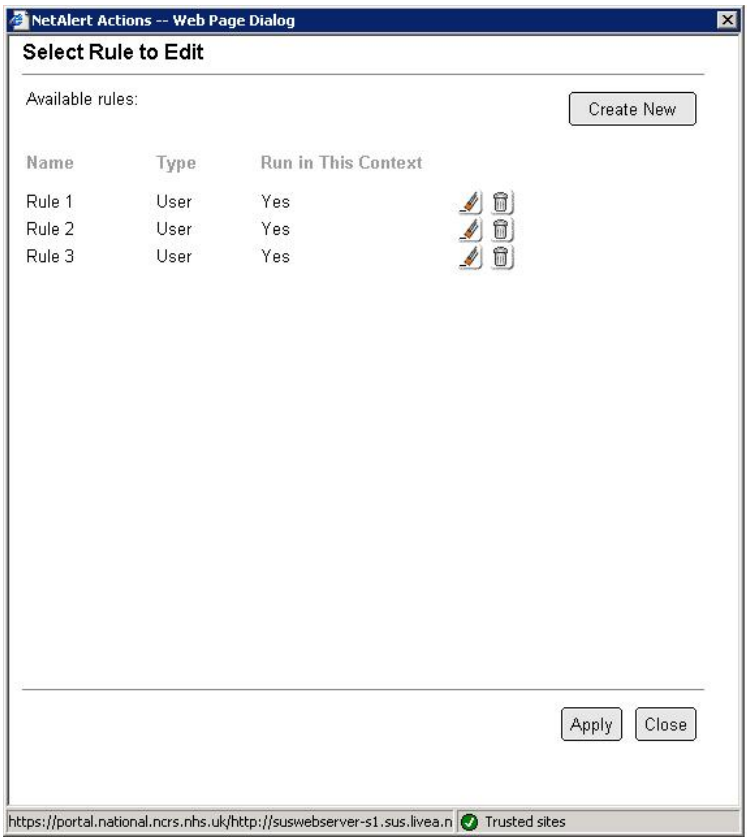


Figure 67 – Select Rule to Edit screen, 3 rules

17.5 To edit an Action

1. Run the report containing actions to be edited.
2. Click an individual **cell**, a **row** or **column header**, or the **entire table**.
3. Select the **Actions** label option.
4. Click the **Edit Rule** button for the rule to be edited.
5. Edit the rule definition through the **Edit Rule** dialog.
6. Click **Update** to save changes.

17.6 To delete an Action

1. Run the report that contains the action to be deleted.
2. Click an individual **cell**, a **row** or **column header**, or the **entire table**.
3. Select the **Actions** label option from the Pop-up menu that is displayed.
4. Click the **Delete Rule** button associated with the action that requires deletion.
5. Confirm the deletion.

17.7 To enable or disable Actions

When actions have been created they can be controlled by the use of the **Cell Actions** button on the **Frame Control** bar. This button toggles the display of a defined action.

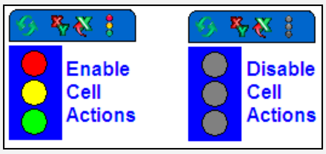


Figure 68 – Enable/Disable Action Display

1. Click the **Cell Actions** button to disable actions that have been defined for the report frame.

   Cell colour formatting and additional options on the Pop-up menu generated by the action will be removed.

2. Click the **Cell Actions** button again to "toggle" and re-apply the actions.

17.8 To define a Pop-up Menu Link Action

The **Actions** button can be used to define additional Pop-up menu options available when you click on a cell highlighted by a (traffic light) rule. Examples are links to other reports, or a specific Web or Intranet location.

1. Click the **Actions** button on the **Simple** or **Advanced** pages of the Edit Rule dialog box.

   The **Actions** dialog box is displayed allowing the user to define a link action.

2. Type a name in the **ENTER NAME** field for the new menu link action being defined. This is the name that will be displayed in the Pop-up menu for the data cell.

3. Click the radio button to specify if the action will display a report or link to a URL.

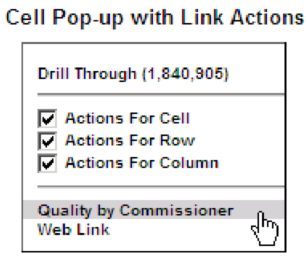


Figure 69 – Example of how the links to reports and URL appear on the Pop-up Menu

17.8.1 If Report is chosen

1. Click the **Browse** button.
2. Select the report to show from the displayed tree structure.
3. Click the **OK** button.

   The selected report is displayed in the field underneath this button.

4. Click the **Apply Context** checkbox to pass any context settings that have been applied to the current report through to the report that you are linking to by this menu option.
5. Click the **Add** button.

   Only users with the correct access rights will be able to view the report.

17.8.2 If URL is chosen

1. Click the **URL** button.
2. Enter the **URL** in the field to the left of Browse.
3. Click the **Add** button.
4. Click the **Up**/**Down** buttons to move the added action to a specific position within the list.
5. Repeat these steps to add further links.
6. Click the **Done** button to save the defined menu link action.
7. Click the **Create** or **Update** button to complete.

17.9 To Delete Pop-up Menu Link Actions

1. Open the **Actions** dialog.
2. Select the action to delete.
3. Click the **Delete** button to remove the link.

18 Work with Report Settings

The SUS Toolkit provides a way for you to save options selected from Pop-up menus and context settings that you have applied to a report.

These settings can be reapplied the next time you run the report, or made available to other users for them to apply to the report when they run it.

18.1 To Save Report Settings

If you have applied particular analysis options or context settings to a report, you can save these settings by clicking the toolbar button.

1. Click the **Report Settings** button to display this toolbar.
2. Click the **Save As** button.
3. Complete the fields in the **Save Report Settings** dialog box.

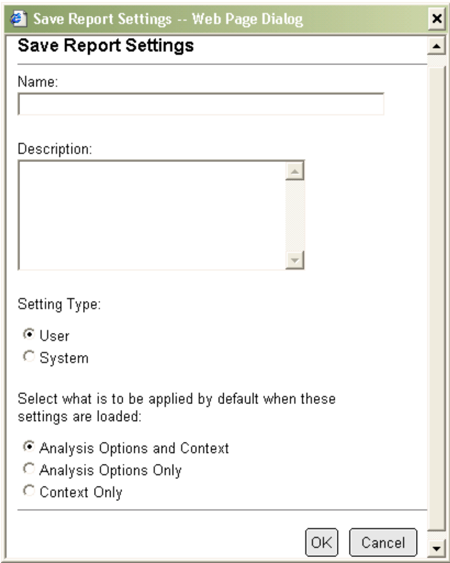


Figure 70 – Save Report Settings dialog Box

NAME	Enter a name that will help you identify the settings again.
DESCRIPTION	Enter a description for the settings that you are saving.
SETTING TYPE	User - Restricts the settings to be used by yourself. System - Shares the settings to be used by all users who can access the current report.
DEFAULT SETTINGS	Select what default settings are applied when the report is loaded.

4. Click the **OK** button to save the current report settings.

18.2 To Load Report Settings

The following enables you to load settings for a report that you have previously defined, or that have been defined as system settings by another user.

1. Click the **Report Settings** button to display this toolbar.
2. Click the **Load** button on the toolbar.
3. Select the settings that you want to apply to the report in the list.

   Descriptions of the highlighted settings if defined will automatically be displayed in the **DESCRIPTION** field.
4. Select what options to load:

   (a) Both the analysis options and the context settings that have been defined.

   (b) The analysis options only.

   Or

   (c) The context settings only.
5. Click the **OK** button to apply the selected report settings.

   When applied the name of the Report Settings is shown in brackets to the right of the Report Title.

   To view the report in its "natural" state (that is, without any settings applied) click the **Load Master** button from the toolbar.

18.3 To Organise Report Settings

1. Click the **Report Settings** button to display this toolbar.
2. Click the **Organise** button on the toolbar to arrange the settings defined for a report.
3. Select one of the settings listed by clicking it.

   (a) Click the **Delete** button to remove the settings.

   (b) Click the **Rename** button to specify a new name for the settings.

   Or

   (c) Click the **Default** button to make the highlighted settings the default (that is, the settings that are automatically applied when the report is first displayed).

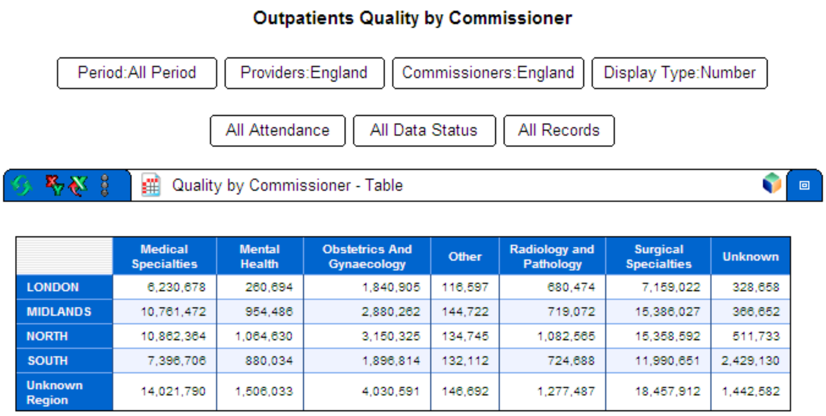
   If the highlighted set of settings is defined as the default, click the **No Default** button to remove the default property.
4. Click the **OK** button.

19 Nest Data

When analysing data it is often useful to modify the way the results are displayed. A typical example would be to look at the breakdown of results over a number of years per cluster as opposed to a standard all encompassing cluster only view. This can be achieved in the SUS Toolkit by making use of functionality referred to as Nesting.

Nesting allows you to take dimensions from the **Context Bar** and place them as required within a table, as either additional rows or columns.

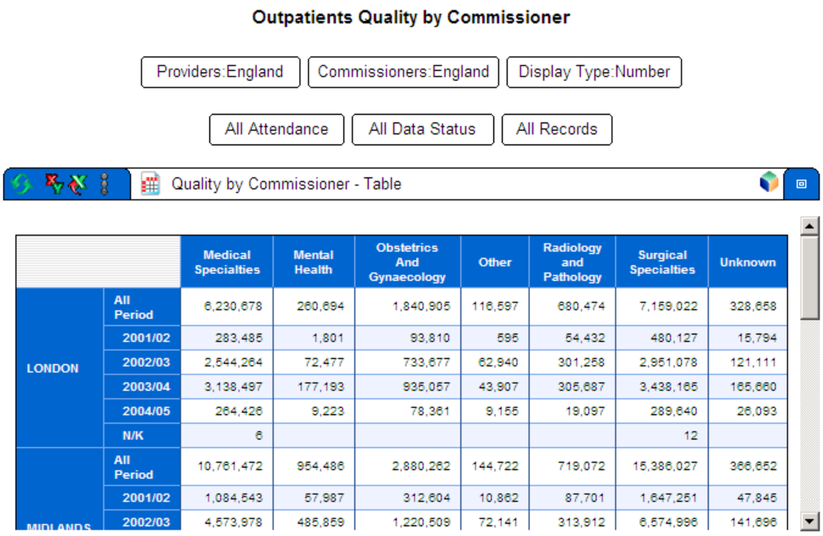
A standard table is made up of columns and rows and may look like the one illustrated below.



	Medical Specialties	Mental Health	Obstetrics And Gynaecology	Other	Radiology and Pathology	Surgical Specialties	Unknown
LONDON	6,230,678	260,694	1,840,905	116,597	680,474	7,159,022	328,658
MIDLANDS	10,761,472	954,486	2,880,262	144,722	719,072	15,386,027	366,652
NORTH	10,862,364	1,064,630	3,150,325	134,745	1,082,565	15,358,592	511,733
SOUTH	7,396,706	880,034	1,896,814	132,112	724,688	11,990,651	2,429,130
Unknown Region	14,021,790	1,506,033	4,030,591	146,692	1,277,487	18,457,912	1,442,582

Figure 71 – Nesting – Standard View

Key points to note about the illustration; the "**Period: All Period**" dimension exists on the **Context Bar**. Both a single row and single column header are visible. The scroll bars are not displayed as all data in this report is visible on screen.

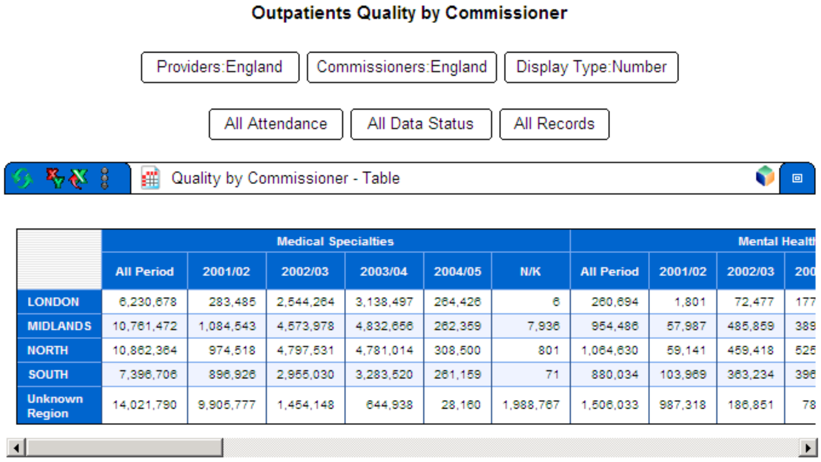


		Medical Specialties	Mental Health	Obstetrics And Gynaecology	Other	Radiology and Pathology	Surgical Specialties	Unknown
LONDON	All Period	6,230,678	260,694	1,840,905	116,597	680,474	7,159,022	328,658
	2001/02	283,485	1,801	93,810	595	54,432	480,127	15,794
	2002/03	2,544,264	72,477	733,677	62,940	301,258	2,951,078	121,111
	2003/04	3,138,497	177,193	935,057	43,907	305,687	3,438,165	165,660
	2004/05	264,426	9,223	78,361	9,155	19,097	289,640	26,093
	N/K	6					12	
MIDLANDS	All Period	10,761,472	954,486	2,880,262	144,722	719,072	15,386,027	366,652
	2001/02	1,084,543	57,987	312,604	10,862	87,701	1,647,251	47,845
	2002/03	4,573,978	485,859	1,220,509	72,141	313,912	6,574,996	141,696

Figure 72 – Nesting – Period Nested (row)

The illustration above shows the result of nesting the "Period: All Periods" dimension to the right of the clusters row header. It shows the geographical data broken down by period (years).

Notice in the illustration; the "**Period: All Period**" dimension no longer exists on the **Context Bar**. Two row headers are now visible and a single column header is visible. A vertical scroll bar is displayed as not all data in this report is visible on screen.



	Medical Specialties						Mental Healt			
	All Period	2001/02	2002/03	2003/04	2004/05	N/K	All Period	2001/02	2002/03	200
LONDON	6,230,678	283,485	2,544,264	3,138,497	264,426	6	260,694	1,801	72,477	177
MIDLANDS	10,761,472	1,084,543	4,573,978	4,832,656	262,359	7,936	954,486	57,987	485,859	389
NORTH	10,862,364	974,518	4,797,531	4,781,014	308,500	801	1,064,630	59,141	459,418	525
SOUTH	7,396,706	896,926	2,955,030	3,283,520	261,159	71	880,034	103,969	363,234	396
Unknown Region	14,021,790	9,905,777	1,454,148	644,938	28,160	1,988,767	1,506,033	987,318	186,851	78

Figure 73 – Nesting – Period Nested (column)

The illustration above shows the result of nesting the "Period: All Periods" dimension below the column header. The "Medical Specialty" data is now broken down by period (years).

In the illustration; the "**Period: All Period**" dimension no longer exists on the **Context Bar.** A single row header is visible and two column headers are now visible. A horizontal scroll bar is displayed as not all data in this report is visible on screen.

It is generally accepted that nesting data for more than three levels produces a very complex table and is therefore not recommended.

19.1 To create a Nested Level

1. Right click on a required context bar item.

   The mouse symbol will now appear with a box (containing the context bar text) attached to the bottom. This text box will stay with the mouse as you move around.

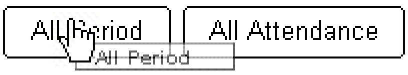


Figure 74 – Representation of Selecting a Context Bar option

2. Move the mouse over column or row headings within the table and right click to nest when the required nesting option is displayed.

   When nesting a context bar item there are five positioning options available. Each position is relevant to a row, column or the context bar as shown in the table below.

	Row	Column	Context Bar
Move After	✓		✓
Move Before	✓		✓
Swap	✓	✓	✓
Move Below		✓	
Move Above		✓	

Figure 75 – Table of Nesting Options

19.1.1 To Move After

1. After right clicking the required **Context Member** move the cursor to the right of the chosen row heading to see the **Move After** caption.
2. Right click to place the selected **Context Member** after the selected row heading.

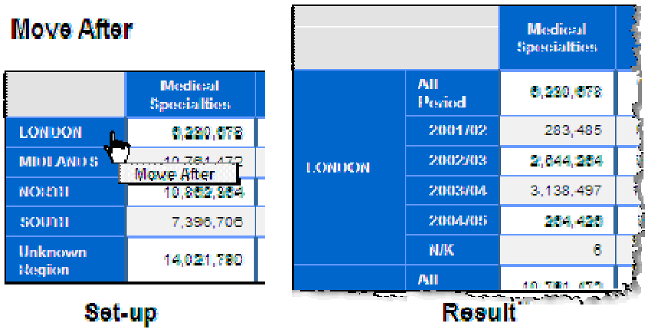


Figure 76 – Nesting – Move After Process

19.1.2 To Move Before

1. After right clicking the required **Context Member** move the cursor to the left of a row heading to see the **Move Before** caption.
2. Right click to place the selected **Context Member** before the selected row heading.

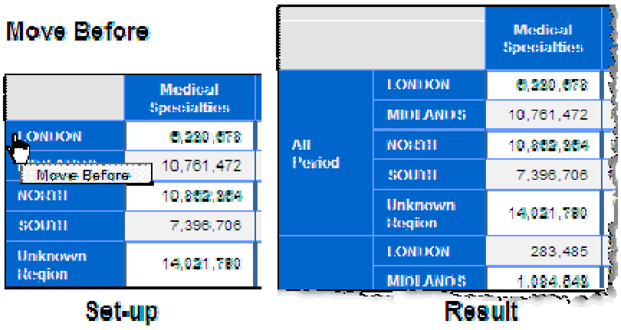


Figure 77 – Nesting – Move Before Process

19.1.3 To Swap

1. After right clicking the required **Context Member** move the cursor to the centre of either a row or column heading to see the **Swap** caption.
2. Right click to replace the current row or column heading with the selected **Context Member**.

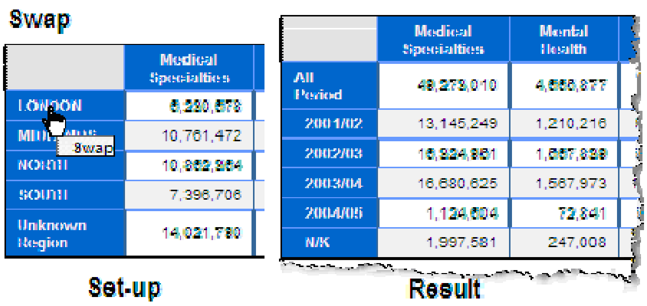


Figure 78 – Nesting – Swap Process

19.1.4 To Move Below

1. After right clicking the required **Context Member** move the cursor below the chosen column heading to see the **Move Below** caption.
2. Right click to place the selected **Context Member** below the selected column heading.

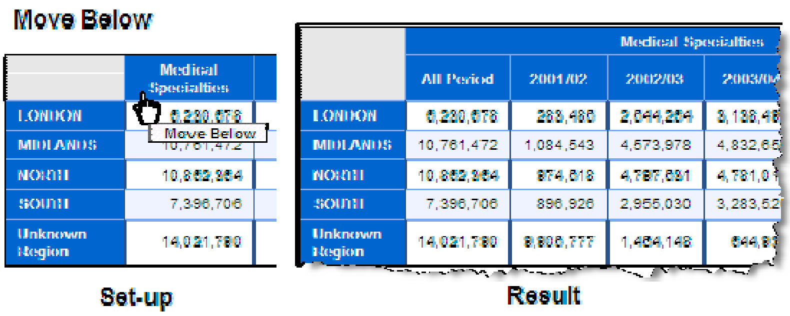


Figure 79 – Nesting – Move Below Process

19.1.5 To Move Above

1. After right clicking the required **Context Member** move the cursor above the chosen column heading to see the **Move Above** caption.
2. Right click to place the selected **Context Member** above the selected column heading.

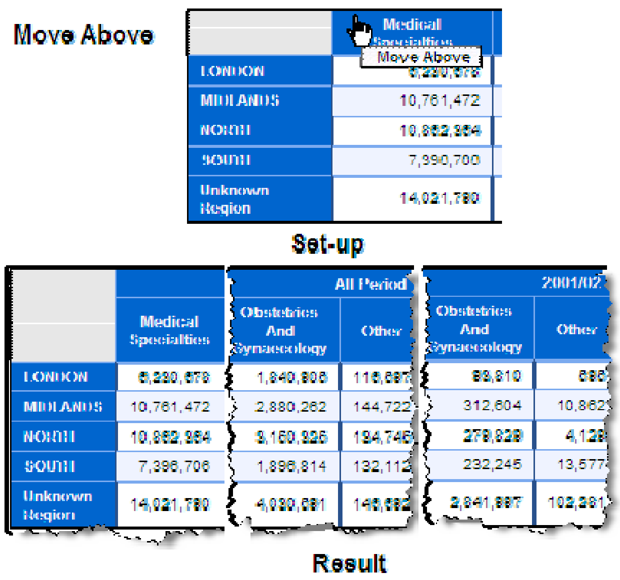


Figure 80 – Nesting – Move Above Process

19.2 To remove a Nested Level

1. Right click on a required nested row or column heading.

   The mouse symbol will now appear with a box (containing the context bar text) attached. This text box will stay with the mouse as you move around.

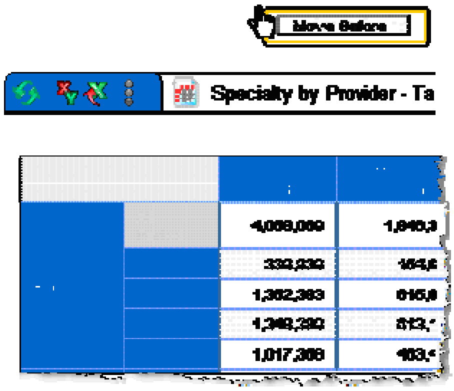


Figure 81 – Removing a Nested Level

2. Move the mouse towards the context bar.

   Tool tips indicating the available positioning options will display as you move your mouse around the context bar. The options are **Move Before**, **Move After** and **Swap**.

3. Right click to return to drop the context when the required positioning option is displayed.

20 Generate a PDF Document

As well as printing through your browser you are able to create printable documents by using PDF creation.

Warning: RBAC and Generated PDF Documents

Created documents are added to your personal documents, however if you have multiple job roles you will have a separate **My Documents** tab within each allocated role. When you are performing a particular role you will not see the documents stored within **My Documents** for your other roles. This means that a generated document will only be visible in the job role to which the document was created. Within multiple job roles you may need to log off and login again to access documents that are stored within specific roles.

1. Open the report that you want to create as a PDF file.
2. Click the **Generate Document/Create PDF** button on the toolbar.
3. A default **Report Title** is created. You can edit this and all other settings using the functionality contained in the **Edit** tab. The context of the report to print can also be amended. In the following sections are more detailed explanations of the settings available to you.

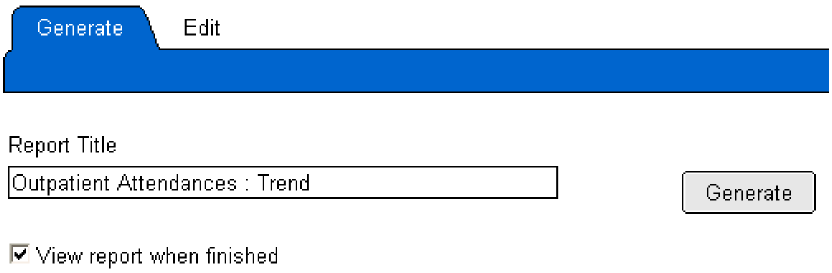


Figure 82 – Generating a PDF

4. Click **Generate** button to complete.

   Note: If you do not wish to view the report immediately when generated, remove the tick from the **View report when finished** checkbox.

   All PDF documents that you create are added to your personal documents ready for viewing or e-mailing. You also have the ability to create your own templates to personalise your outputs.

20.1 To Edit PDF Styles

You can use/edit styles to define the layout and content of the PDF with the added ability of saving the settings for future use.

1. Click the **Generate Document** button.
2. Click the **Edit** tab.

Format the Page, Header, Footer and/or Body areas

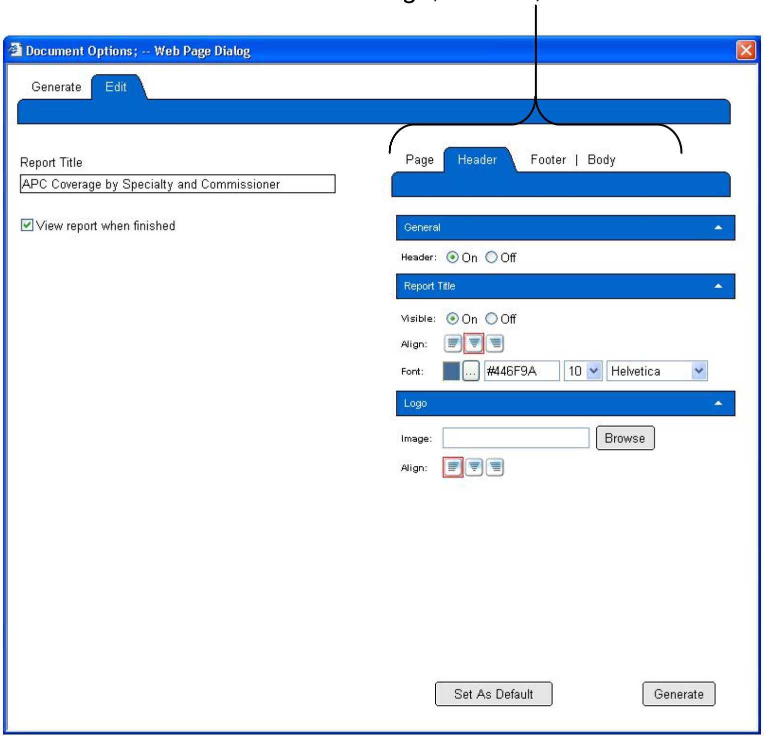


Figure 83 – PDF – The Edit tab

20.1.1 To format the Page

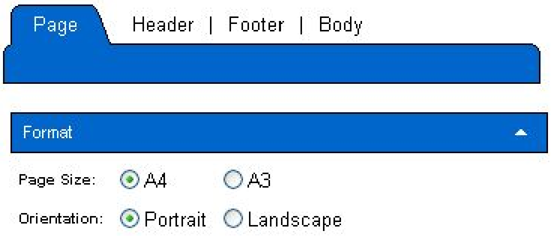


Figure 84 – PDF – Page options

1. Click the appropriate **radio** button to set the **Page Size**.
2. Click the appropriate **radio** button to set the **Orientation**.

20.1.2 To format the Header and Footer

> As the options available are nearly the same the steps listed can be applied when using the **Header** or **Footer** tab.

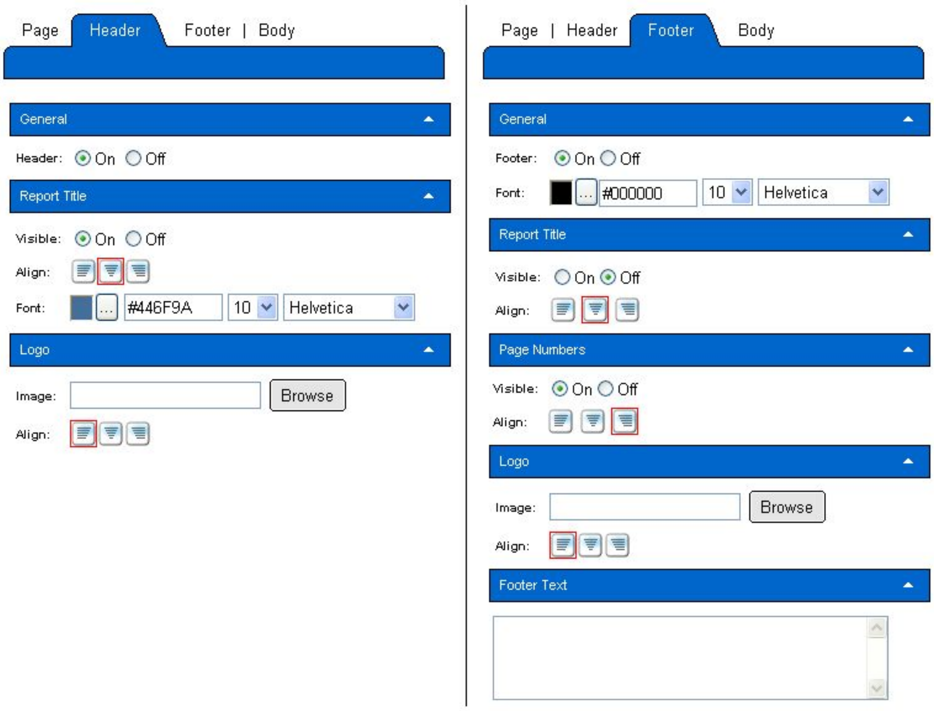


Figure 85 – Generating a PDF – Header and Footer options

1. Click the **Header** or **Footer** tab.
2. Click the or icons to open/close sections.
3. Click the appropriate **radio** button to turn the header/footer on or off in the **General** section.

   <u>Further options</u>

   - Select the **font** from the drop down list.
   - Click the **colour** button and select the font colour from the colour picker.
4. Click the appropriate **radio** button to turn the header/footer **Report Title** on or off.
5. Click the **left align**, **centre align**, or **right align** button to position the title. The selected option will be highlighted by a red border.

   <u>Further options</u>

   - Select the **font** from the drop down list.
   - Click the **colour** button and select the font colour from the colour picker.
6. To select a **Logo** to include in the header/footer, click the **Browse** button, select the required logo and click the **Select** button to confirm.
7. Click **left align**, **centre align**, or **right align** button to position the logo. The selected option will be highlighted by a red border.

20.1.3 To format the Footer (additional options)

Due to the footers position you have the ability to specify how page numbering should be displayed.

1. Click the appropriate **radio** button to turn **Page Numbers** on or off.
2. Click the **left align**, **centre align**, or **right align** button to position the page numbers in the footer. The selected option will be highlighted by a red border.
3. Enter any text that you want to appear in the **Footer Text** section.

20.1.4 To format the Body

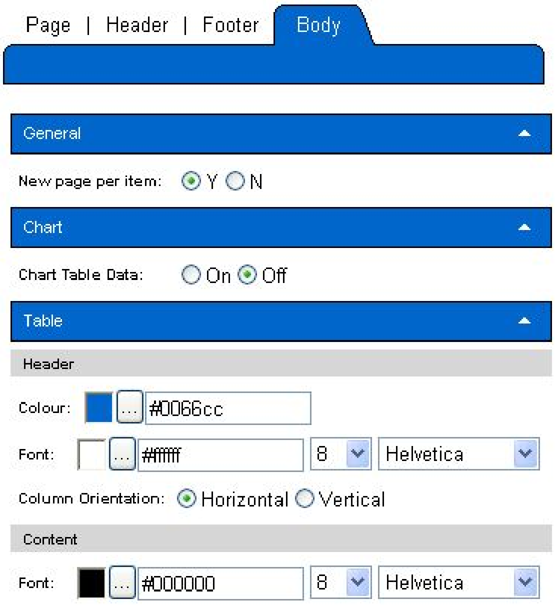


Figure 86 – Generating a PDF – Body options

1. Click the **Body** tab.
2. Click the appropriate **radio** button to set if you want each data table and chart included in a report to be placed on a different page of the PDF in the **General** section.
3. Click the appropriate **radio** button to include the data table that the chart is generated from.
4. Set the **Table Header** options.
   - Click the **colour** button and select the background **Table Header Colour.**
   - Select the **font** from the drop down list.
   - Click the **colour** button and select the **Font Colour** from the colour picker.
   - Click the appropriate **radio** button to set the **Column Orientation**, i.e. whether the table headers are printed vertically or horizontally.
5. Set the **Table Content** options.
   - Click the **colour** button and select the background **Table Body Colour.**

20.1.5 To save and create a PDF

1. Click the **Set As Default** button to set the PDF style as your default (if required).
2. Click the **Generate** button when you are happy with the layout and the content of your PDF.

21 Document Management

All documents that you create are stored within your own personal document area. This is called “**My Documents**”.

You can view the documents that you have produced or are in the process of generating. These can be printed, saved or deleted. They can also be published to your subscribed interest groups and if able you can view other users’ documents.

Warning: RBAC and Generated PDF Documents

Created documents are added to your personal documents, however if you have multiple job roles you will have a separate **My Documents** tab within each allocated role. When you are performing a particular role you will not see the documents stored within **My Documents** for your other roles. This means that a generated document will only be visible in the job role to which the document was created. Within multiple job roles you may need to log off and login again to access documents that are stored within specific roles.

21.1 To access your Personal Documents

1. Click the **My Documents** tab to the left of the Navigation Bar.
2. Click the **Personal Documents** icon in the Application Menu to display a list of your Personal Documents.

   Note: It defaults to this when you click my documents.

   These documents are the PDF files that you are producing or have previously generated. They are listed displaying date/time of request, the reports’ name and status.

Select	Requested	Name	Status	
	2007-01-08 17:02:27	APC0607SummaryProvider	Completed	
	2006-12-18 16:14:22	PbR0607CDSSummry	Completed	

Figure 87 – Personal Documents List example

   The document’s status can be one of four types at any given time (Queued, Pending, Running or Completed). Only the status of Completed enables you to view the report.

3. Click the **Personal Documents** icon to refresh the status against your document list.

21.2 To view a Personal Document

1. Click the **My Documents** tab to the left of the Navigation Bar.
2. Click the **Personal Documents** icon to display your document list.
3. Click the **View** button to the right of a document to open.

   An information screen will display showing the name of the document with any accompanying notes.

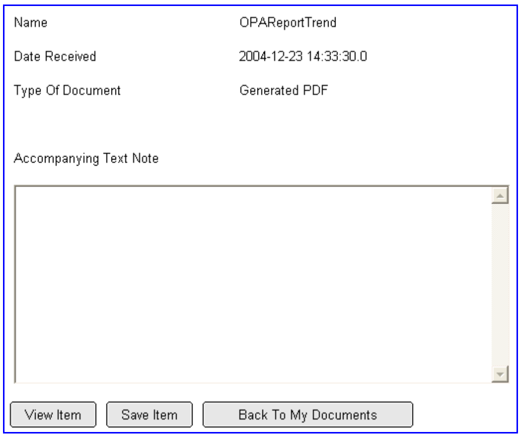


Figure 88 – My Documents, Viewing Document Information

4. Click the **View Item** button to display the document in the Application Work Area.

   The chosen report displays with one button.

5. Click the **Back to the Object Details** button to return to the Documentation Information dialog.

6. Click the **Back To My Documents** button to return to the list of documents.

21.3 To save a Personal Document Copy

1. Click the **My Documents** tab to the left of the Navigation Bar.
2. Click the **Personal Documents** icon to display your document list.
3. Click the **View** button to the right of a document to open.

   An information screen will display showing the name of the document with any accompanying notes.

4. Click the **Save Item** button to save a copy of the document/report.

21.4 To Delete a Personal Document

1. Click the **My Documents** tab to the left of the Navigation Bar.
2. Click the **Personal Documents** icon to display your document list.
3. Click the **Delete** button to the right of the document to remove.

   Or

   Click multiple checkboxes in the select column to remove more than one document and click the **Delete** button.

21.5 To View a Published Document

1. Click the **My Documents** tab to the left of the Navigation Bar.
2. Click the **Scheduled Documents** icon in the Application Menu to view a list of the accessible published documents.
3. Click the **View** button to the right of a document to open.

21.6 To Save a Published Document Copy

1. Click the **My Documents** tab to the left of the Navigation Bar.
2. Click the **Scheduled Documents** icon to display a document list.
3. Click the **View** button to the right of a document to open.

   An information screen will display showing the name of the document with any accompanying notes.
4. Click the **Save Item** button to save a copy of the document/report.

21.7 To Delete a Published Document

1. Click the **My Documents** tab to the left of the Navigation Bar.
2. Click the **Scheduled Documents** icon to display a document list.
3. Click the **Delete** button to the right of the document to remove.

   Or

   Click multiple checkboxes in the select column to remove more than one document and click the **Delete** button.

21.8 To Mark Published Documents as Read/Unread

Published documents are indicated as being “Read” or “Unread”; this helps you track which documents you have viewed. All documents added to your published list are initially assigned an “Unread” status. When viewed the document is automatically updated to “Read”.

1. Navigate to the document list.
2. Click one or more checkboxes in the select column to choose document(s).
3. Click the **Mark as Read** button.

   Or

   Click the **Mark as Unread** button.

22 To run a Data Extract

Organisations frequently perform their own analysis of data using software of their choosing. In order to do this data needs to be exported in a format suitable for that purpose. The Data Extract tool provides a means for you to generate an export file in a format of your choosing. The file can be configured to specifically contain data that meets your organisations requirements.

Before running an extract you configure how your extract will run and what data it will output. You may also want to opt to use a predefined configuration, then adapt it to meet your own requirements speeding up the process of running an extract.

1. Click the **Applications** tab.
2. Expand the required **Data Extract** folder.

- Open the **2011/2012 PbR** folder (according to the year required)
- Click the **SUS Extracts Mart Folder 2010** (according to the year required.
- Click 2011/12 **PbR Extracts** (according to the year required)
- Continue from step 4 below

3. Click the name of the extract that you wish to view.

   The **Configure Extract** dialog box is shown. It has three configurable tabs for the extract you are creating these are **Extract**, **Columns** and **Output**. Also a predefined **Select Configuration** drop down option is displayed.

4. Click the **Select Configuration** drop down option if you wish to use a predefined set up.

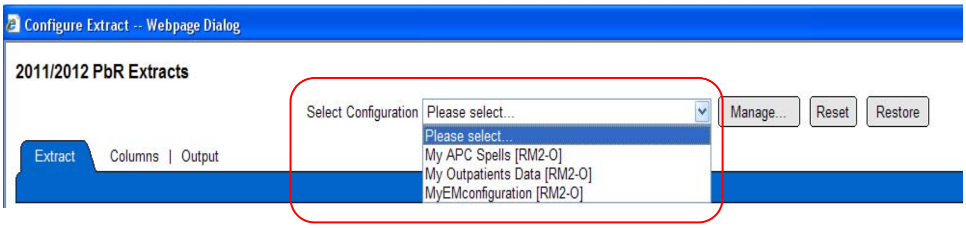


Figure 89 – Select Configuration drop down

Additional 'Select Configuration' buttons

Manage will manage any predefined configurations (if they exist); you are only able to manage configurations that you have created.

Reset will reset and remove any configuration changes made in the current session.

Restore will restore the settings for the current configuration to your original "factory" settings.

5. Apply settings within the **Extract** tab.

22.1 To set up the Extract tab

The displayed fields are dependent on the data extract that is being run. The example below is based on running a 2011/2012 PbR Extract.

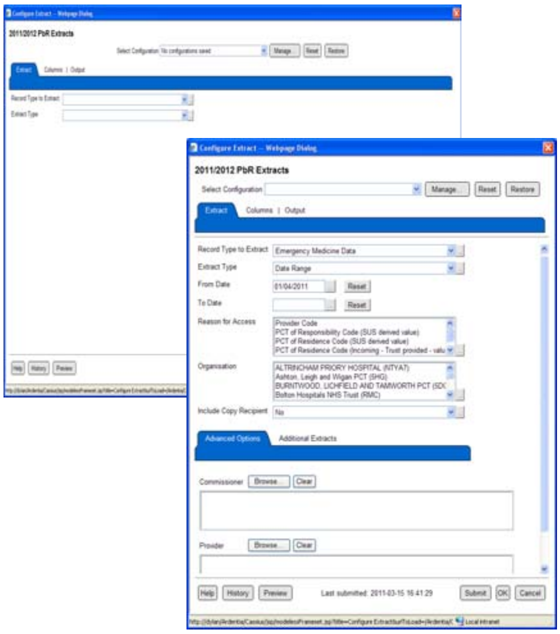


Figure 90 – Configure Extracts Example

Apply settings using the **Extract** tab; select the parameters that you want to use to filter the data that is included in the extract. The settings you can apply are determined by the data that the extract displays.

- Click any provided drop down lists.

  RECORD TYPE TO EXTRACT

  EXTRACT TYPE

- Use the .. button where required to open dialog boxes and complete any fields.

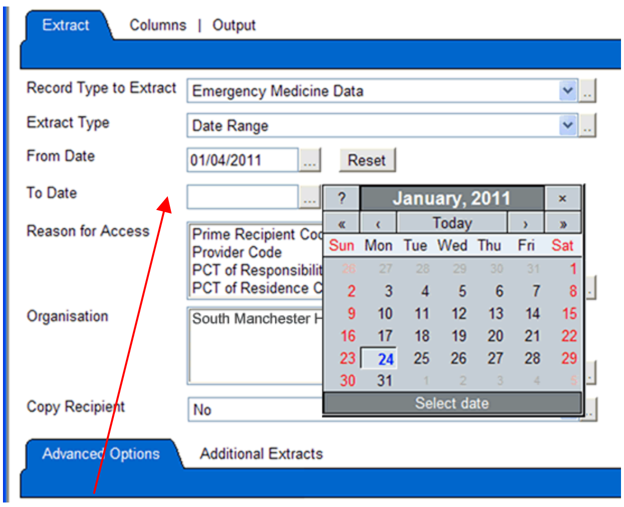
  REASON FOR ACCESS

  DATE FIELDS

- Set further options using the sub tabs.

  ADVANCED OPTIONS

  ADDITIONAL EXTRACTS



FROM DATE and **END DATE** only display when **Date Range** is selected

Figure 91 – Configure Extracts Example, PbR Extract 10/11

6. Click the **Columns** tab.
7. Apply settings within the **Columns** tab.

22.2 To set up the Columns tab

The **Columns** tab enables you to add, remove and order the columns that will be displayed in the extract. By default all columns are included in the output columns (**but for PbR nn/nn some columns are pre-configured to be excluded for certain extract types**). The lists may be a hierarchical structure or simple list depending on the definition of the extract.

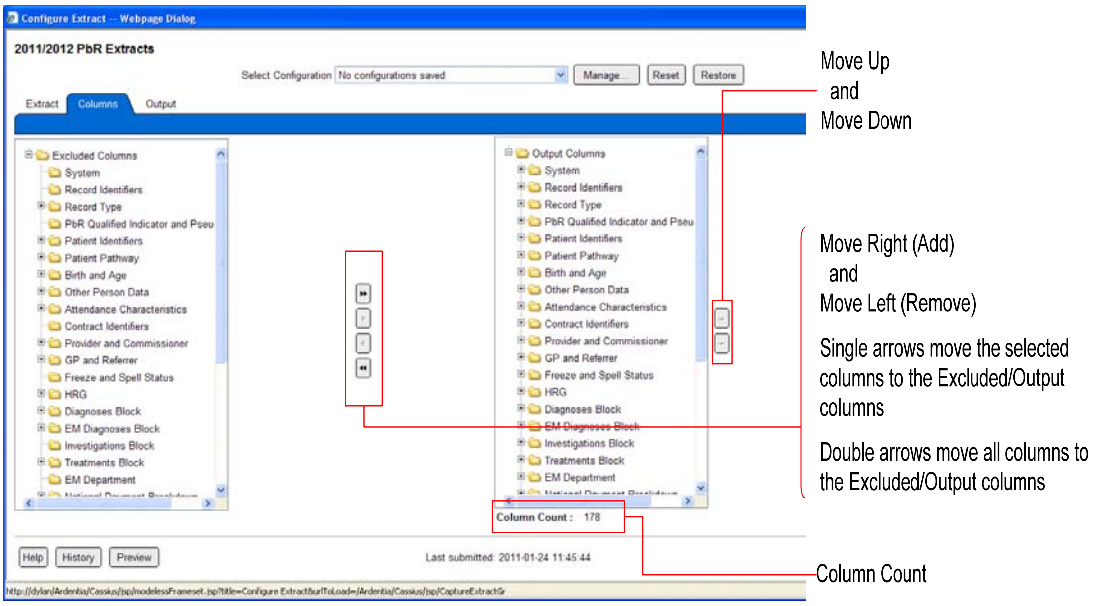


Figure 92 – Configure Extracts – The Column tab

The right hand (**Output Columns**) pane contains the list of columns that will be included when the extract is produced. Moving a column into the left hand (**Excluded Columns**) pane will mean that it is not included in the output.

Beneath the **Output Columns** pane a **Column Count** updates as columns are added or removed from the list. You must have at least one column present in the **Output Columns** pane to submit an extract.

8. To remove a column from the **Output Columns** pane, highlight the required column and click the **Move Left (Remove)** button.

   The selected Column will be placed in the **Excluded Columns** pane.

9. To add a column to the **Output Columns** pane, highlight the column in the column pane and click the **Move Right (Add)** button.

   The selected Column will be placed in the **Output Columns** pane at the bottom of the list.

10. To change the order that the columns will appear in the extract, highlight the column that you want to move in the **Output Columns** pane.

11. Click the **Up** or **Down** button depending whether you want to move the column up or down the order.

12. Click the **Output** tab.

13. Apply settings within the **Output** tab.

22.3 To set up the Output tab

The output tab is used to define the format of the extract file, the options are those points listed below (points 14 onwards). The **EXTRACT NAME** may be populated based on previous selections made in the **Extract** tab.

14. Edit the **EXTRACT NAME** if required (no spaces are allowed in the name).

15. Select **FORMAT**; a Comma-Separated Values (**CSV**) file contains the values in a table as a series of text lines organised so that each column value is separated by a comma from the next column's value and each row starts on a new line. If you choose the **Delimited** option you must specify the delimiter that you want to use.

16. Select **ENCLOSING CHARACTER ESCAPING** and set as required. When a CSV output is requested, the output fields are enclosed in quotes and separated by commas. If a quote character is present within the data, then the format of the output columns can be misinterpreted by applications such as Excel.

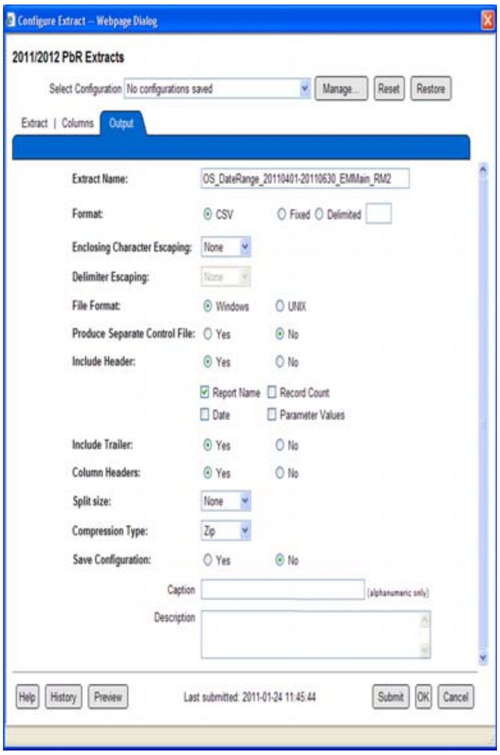


Figure 933 – Configure Extracts – The Output Tab

This is resolved by selecting an appropriate option. **None** (no modification is made to the output data), **Standard** (if a quote is found within the data for CSV output then they are escaped using the standard backslash format) or **Excel** (if a quote is found within the data for CSV output they are escaped using the method of adding a second double quote to the output).

17. Select **DELIMITER ESCAPING** and set as required. If the output of an extract is requested as delimited, then each field is separated by a selected delimiter (e.g. a "," or "|" character is common). However, if the delimiter also exists in the data of fields within the output then there is no way of distinguishing between a true delimiter and a delimiter within the data. This is resolved by selecting an appropriate option. **None** (no modification is made to the output data), **Standard** (delimiter characters in the data for "delimited" output format are escaped using the standard backslash format - this does not apply to CSV selections) or **Excel** (if a field contains a delimiter in the data for "delimited" output format then the field is enclosed within quotes - this does not apply to CSV selections).

18. Select **FILE FORMAT** to specify what type of system the file is to be used on.

19. Select **PRODUCE SEPARATE CONTROL FILE** to separate the headers and data of a standard data extract into two files.

20. Select **INCLUDE HEADER** and additional options required to include in the extract header. Options are **Report Name**, **Date**, **Record Count** and **Parameter Values**.

21. Select **INCLUDE TRAILER** as part of the produced extract.
22. Select **COLUMN HEADERS** to include column headers in the extract.
23. Set the **SPLIT SIZE** for the extract (if required).
    Large extracts can be split into multiple files when the size specified in this field is exceeded. (If the split size is set to 10MB and an extract of 20MB was being run, two extract files of 10MB each would be produced).
24. Select a **COMPRESSION TYPE**. Extract files can be compressed to reduce the length of time they take to transfer. If a file Split Size has been defined the compression will take place following the splitting process.
25. Select **Yes** to save the configuration options specified if you want to retain the settings for future extracts. (For one off extracts leave as **No**).
26. Enter a name in the **SAVE CONFIGURATION** '**CAPTION'** field.

    Configuration names can only use letters, numbers and the period, underscore and hyphen characters (' ', '_', '-'). If you try to use the same configuration name as another an error message is displayed. The name must be meaningful and distinctive; the system will check the names uniqueness.
27. Enter further information in the **SAVE CONFIGURATION** '**DESCRIPTION'** field.

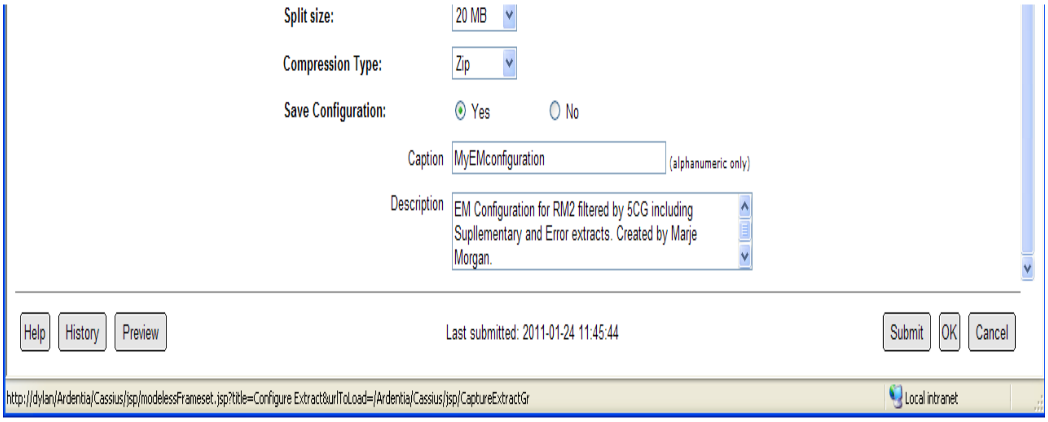


Figure 94 – Save Configuration

The next time you choose to run the extract the saved configuration will be available for selection from the **Select Configuration** list at the top of the dialog box.

<u>Note</u>: When you submit an extract, additional information is recorded (your Organisation code associated to your Access Profile) to control how your extract data is output (clear or encrypted text) and generated based on the activities within your Access Profile.

This also allows other users who belong to the same Organisation (and same RBAC settings as the extract) to have access to the generated extract file(s) when they access the My Documents, Data Extracts option.

Configurations created by individuals other than you are indicated with a suffix as follows:

[O] = Created by users within the same Organisation as you.

[G] = Global, created by users within a different Organisation to you.

Note: You are notified when opening the **Configure Extract** dialog if a new Configuration is available.

Figure 95 – New configurations available message

28. Click the **Preview** button to test an extract before it is submitted to the scheduler to check that it has been configured correctly and that it is returning data as expected. It will return the first fifty rows of data in the file format specified on the **Output** tab of the **Configure Extract** dialog. You will be prompted to either save or open the generated file once the results have been processed.

29. Click the **OK** or the **Submit** button.

Note: If this is the only extract you want to run, clicking the **OK** button will exit from the dialog when the extract is run. However, clicking the **Submit** button will keep the dialog box open, enabling you to change the context of the extract before resubmitting it

This will display the **Extract Initiation message**.

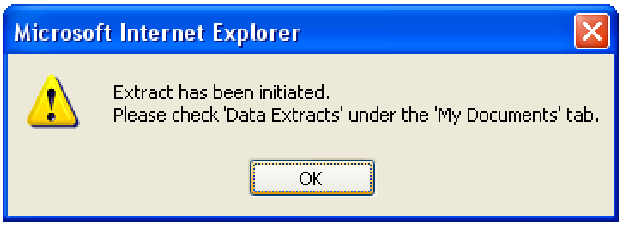


Figure 96 – Configure Extracts – Extract Initiated

30. Click the **OK** button.

22.4 To Manage Predefined Extract Configurations

After having saved an extract configuration you are able to manage its availability to other users through the **Manage** button on the Configure Extract screen.

Prior to the SUS R7 Release you could only save the extract configurations for your own personal use as 'saved extracts'. Now all existing and new extracts are visible to users within your own organisation by default. Any extracts that are classed as 'shared' are available to all users (i.e. not organisation specific).

1. Click the **Applications** tab.
2. Expand the required **Data Extract** folder.

- Open the **2011/2012 PbR** folder (according to the year required)
- Click the **SUS Extracts Mart Folder 2010** (according to the year required.
- Click 2011/12 **PbR Extracts** (according to the year required)
- Continue from step 4 below

3. Click the name of the extract that you wish to view.

   The **Configure Extract** dialog box is shown.

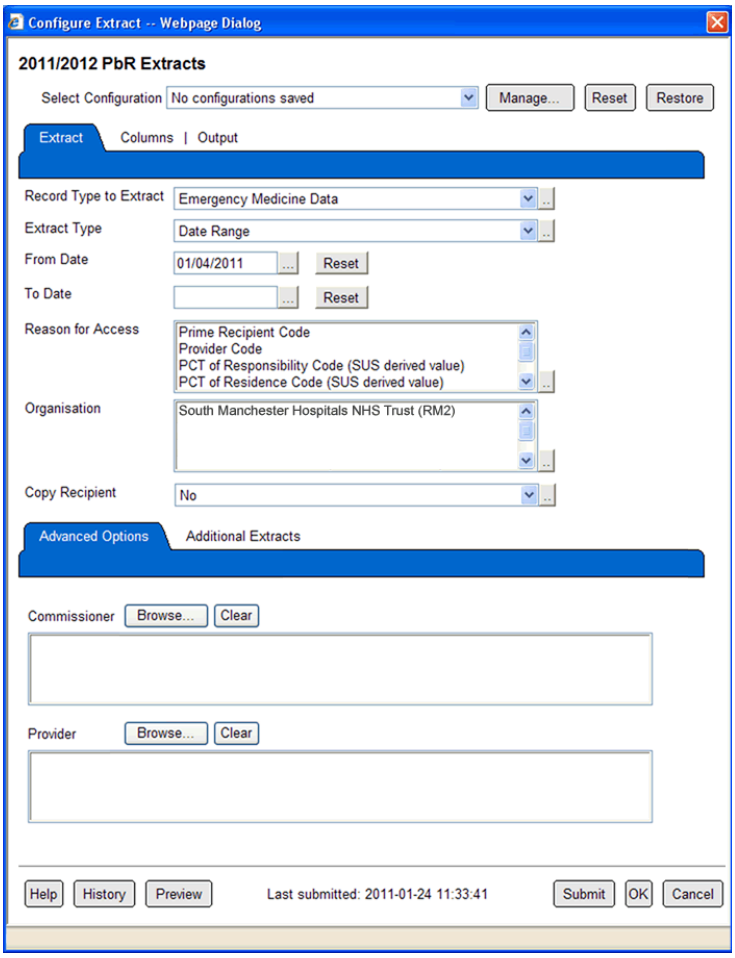


Figure 97 – Configure Extract dialog box

4. Click the **Manage** button.

The **Configure** dialog box is shown.

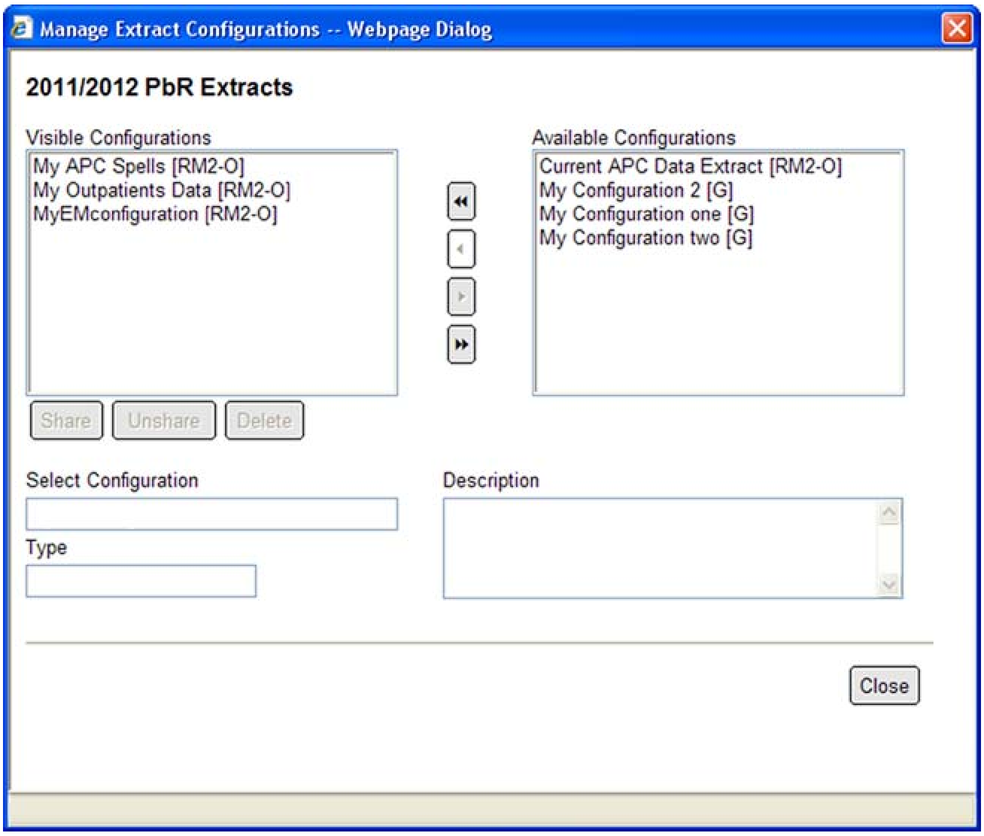
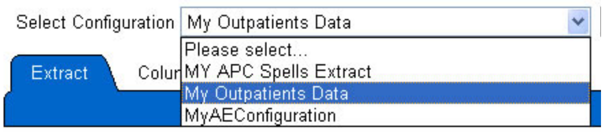


Figure 98 – Manage Extract Configurations dialog box

Visible Configurations are those extract constructions that you want to display in your **Select Configuration** drop down list.



Share button sets the selected configuration available to all users.

Unshare button makes the 'shared' by you configuration return for your use only.

Delete button enables you to delete a configuration you created.

Available Configurations are extract constructions that you can add to your Visible Configurations and then appear in your **Select Configuration** drop down list.

Select Configuration provides the configuration name.

Type states the type of extract configuration

Self is your own configuration, created and save pre SUS R7.

Organisation [O]	are configurations created by you or other users within your organisation since the SUS R7 release.
Global [G]	are configurations created by anyone and shared.

Description is a note area that may describe what the configuration does, it may provide further details as to who created it and a summary of the extracts usage.

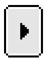
22.4.1 To Move Configurations

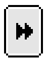
The right hand (**Available Configurations**) pane contains a list of predefined extract constructions that are available. Moving an extract into the left hand (**Visible Configurations**) pane will mean that it will appear in your **Select Configuration** drop down list.

- Highlight the required configuration in the appropriate pane and click the **appropriate move** button.


Move all **Available Configurations** to the **Visible Configurations** pane.


Move the selected **Available Configurations** to the **Visible Configurations** pane.


Move the selected **Visible Configurations** to the **Available Configurations** pane.


Move all **Visible Configurations** to the **Available Configurations** pane.

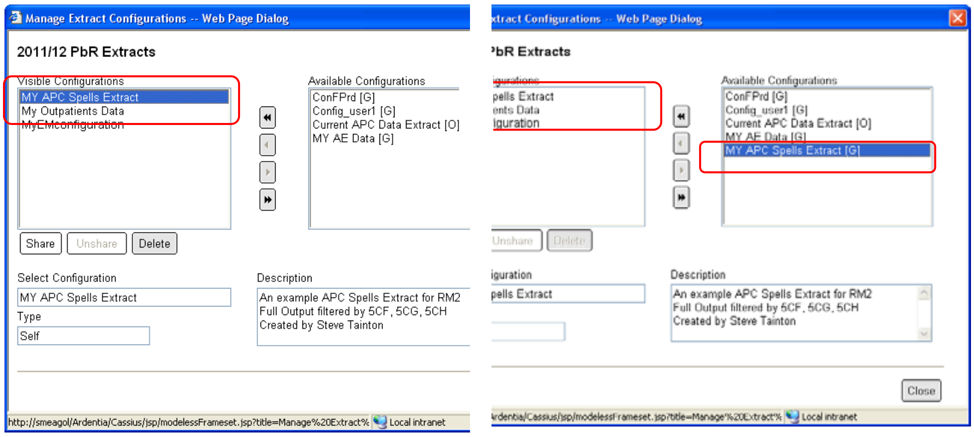
22.4.2 To Share a Configuration

The **Share** button when selected sets the extract configuration as being available to all users. Your configurations are available to all users within your organisation by default and can only be shared with other organisations by positive action (clicking the **Share** button).

You should note however that configurations produced by an SHA user cannot be viewed by users within child organisations until they are positively shared.

Also should you become an ‘inactive’ user your shared configurations will continue to be available to other users.

1. Select the extract to share in the **Visible Configurations** pane.
2. Click the **Share** button.



Before Sharing **After Sharing**

Figure 99 – Sharing a Configuration

When you share an extract it appears in the **Available Configurations** pane with a [G] after its name as well as remain in the **Visible Configurations** pane.

Note: When you share a configuration only the column selections are made available to other users, in essence the configuration behaves like a template with the user applying their own context and output choices. The user can also opt to save their selections as an extract configuration.

If the name is not unique you will be prompted to enter a different name. You can then click the **Test** button to check for name uniqueness.

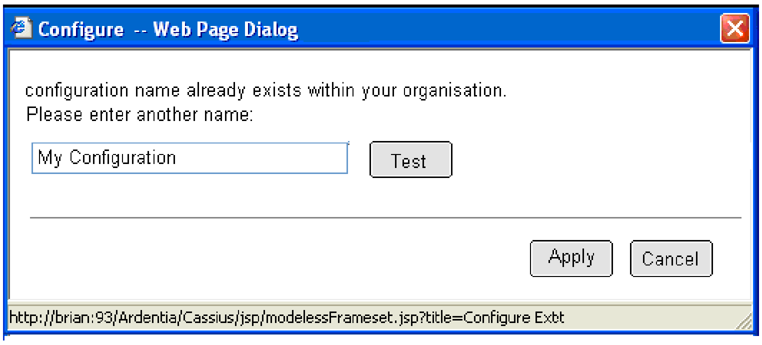


Figure 100 – Configure name already exists

- Click the **Apply** button.

Note: If you update your shared configuration, any extracts that are already scheduled will be executed with the context and column selections that were originally applied and any when other users reload the extract their selections will show as per the last extract submission until they opt to apply the shared configuration again.

22.4.3 To Unshare a Configuration

You can only use the **Unshare** button with configurations that you have shared. When you unshared a configuration it removes all links other users have to your configuration and sets it back for your use only.

1. Select the extract to unshare in the **Visible Configurations** pane.
2. Click the **Unshare** button.

   The configuration will remain in the **Visible Configurations** pane and be removed from the **Available Configurations** pane.

22.4.4 To Delete a Configuration

You can only use the **Delete** button with configurations that you have created. The button will be disabled for configurations other than your own. When you delete a configuration it deletes all links other users have to your configuration and removes it from the displayed pane(s).

It does not impact extracts that are executing or pending as the configuration was applied at the point of extract submission not running.

1. Select the extract to delete in the **Visible Configurations** pane.
2. Click the **Delete** button.

   A confirmation message displays.

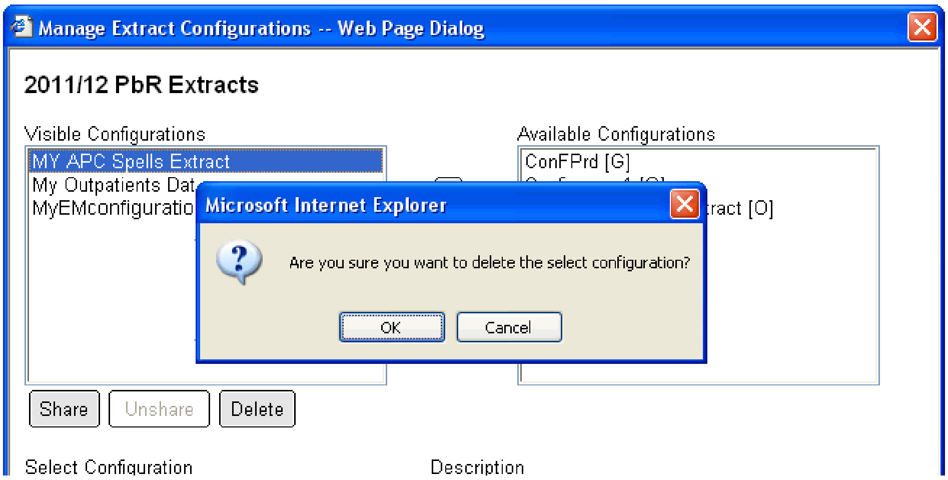


Figure 101 – Delete configuration

3. Click the **OK** button.

22.5 To View a Data Extract

When created data extracts are stored within the **My Documents** menu.

1. Click the **My Documents** tab to the left of Navigation Bar.

2. Click the  **Data Extracts** icon to display a list of previously run data extracts.

   The extracts will be listed with additional information.

Requested	Date that the extract was requested.
Completed	Date that the extract was completed.
Application	The source mart.
Name	The extract name.
Status	The status of the extract Executing, Completed or Failed.
Size	Extract file size in bytes.
Transferred	Whether the extract has been successfully transferred.

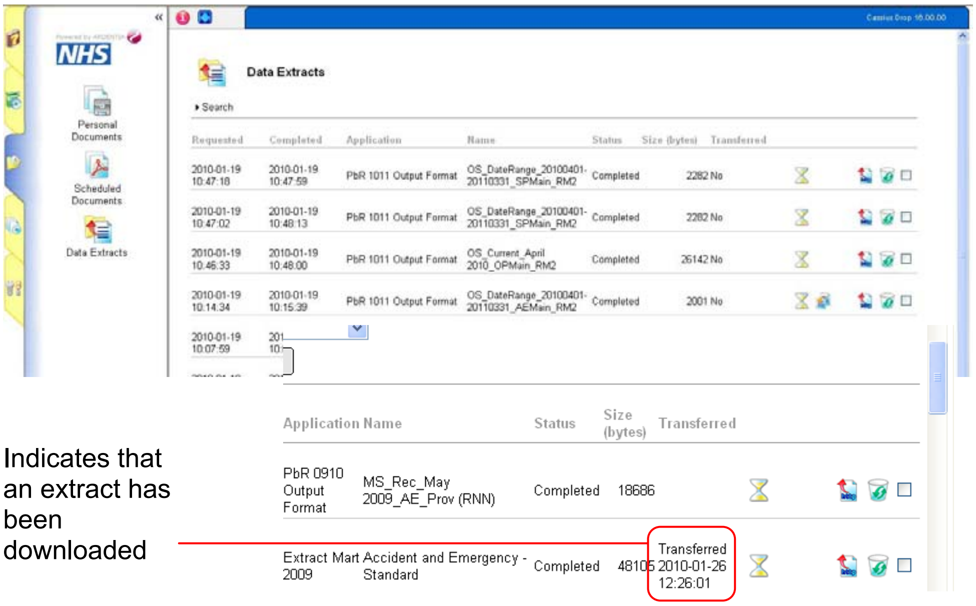
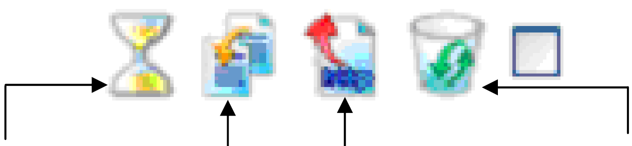


Figure 102 – Viewing Extracts – Data Extracts



View Details

Use this icon to see the settings applied when the extract was run.

Linked Extract

Use this icon if an extract record is linked to other Supplementary and/or Error extracts. The Linked Extract icon will be displayed next to the record if available.

HTTP Transfer

Use the HTTP icon to download a file to your PC

Remove Extract

Use this icon to remove a single extract from the list.

Figure 103 – Viewing Extracts – Icons

3. Click the **View Details** icon to open the view details page.

The view details page will list the following information.

Name	The unique name of the extract.
Title	The caption of the extract. The extract name displayed in an application's table of content.
Analysis	The Business Query name which was the basis for the extract.
Datasource	The datasource from which the extract was taken.
Schema	The schema used when the extract was run.

Context Parameters

Parameters	The parameters available for configuration when the extract was run.
Value	The values selected for the available parameters when the extract was configured.

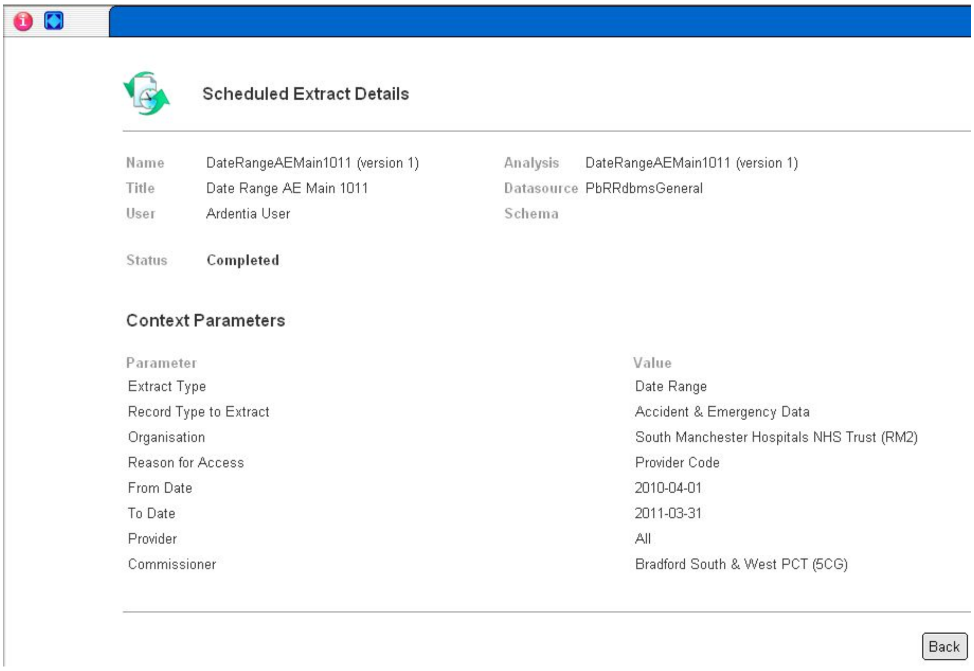


Figure 104 – Viewing the Extracts Details

4. Click the **Back** button to return to the list of extracts.

22.5.1 To Search for a Data Extract

You can limit the displayed list of previously run data extracts by using the Search facility.

1. Click the **My Documents** tab to the left of Navigation Bar.
2. Click the **Data Extracts** icon to display a list of previously run data extracts.
3. Click the ► **Search** option (above the displayed list of extracts).

   The search criteria panel displays.

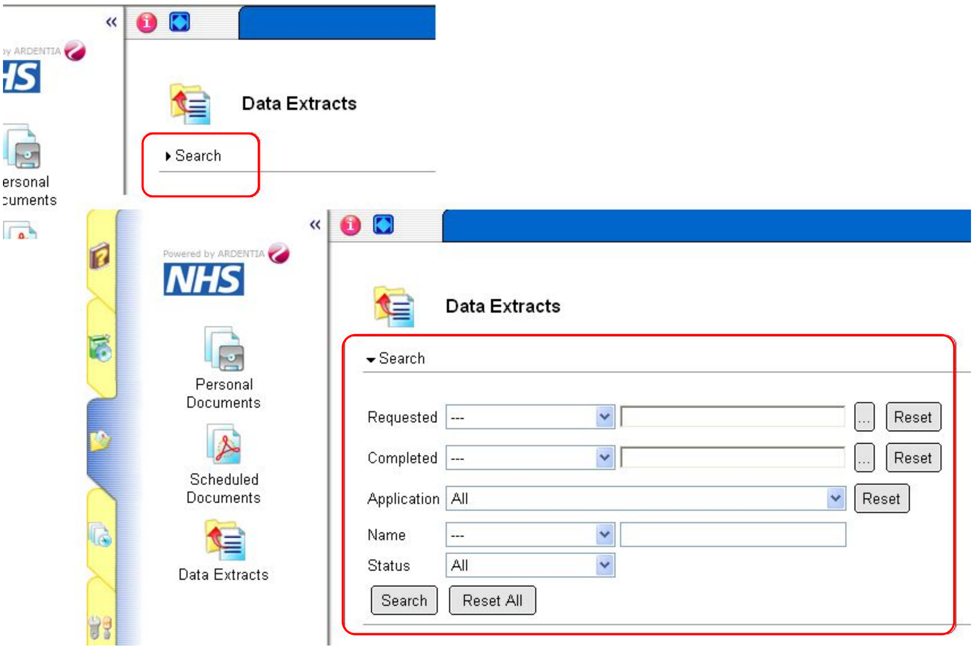


Figure 105 – Data Extracts Search criteria panel

4. Set your required search criteria using the appropriate drop down fields and use the [...] button where required to open dialog boxes and complete any fields.
5. Click the **Search** button to perform your search.

22.6 To Transfer a Data Extract

In order to make use of a data extract file it needs to be transferred from the extract list to a storage location (folder) on your PC.

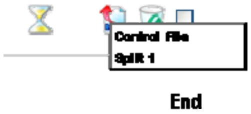
The method of doing this is by use of the **HTTP Transfer** icon.

The SUS/PbR system transfers data using HTTPS.

HTTPS Web browsers will encrypt text automatically when connected to a secure server, evidenced by an address beginning with ***https***. The server decrypts the text upon its arrival, but as the information travels between computers, interception of the transmission will not be fruitful to anyone "listening in." They would only see unreadable gibberish.

22.6.1 To view the Control File for the Data Extract

1. Click the **HTTP Transfer** icon to the right of the extract to transfer.
2. Click the **Control File entry**, from the displayed list to commence the download of the Control File.
3. Click the **Open** button on the File Download dialog box. This allows you to open and view the control file contents or if you wished to save the file you would select the **Save** option. The Control File is displayed in MS Excel. When you have finished reviewing the header details close the spreadsheet to return to the Data Extracts page.



22.6.2 To Transfer the Extract

4. Click the **HTTP Transfer** icon again.
5. Click the **Split 1** entry to commence the download of Split 1. Follow this process for each split file.
6. Click **Open** on the **File Download** dialog box.
   This allows you to open and view the Split 1 file contents or if you wished to save the file you would select the **Save** option.

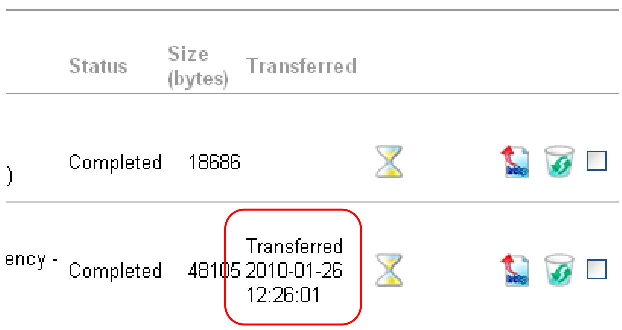
   As the downloaded file has been compressed the file opens in a compressed file viewer (i.e. Winzip) from which you can select the file to view.
7. Select the readme.txt file to open and view its content.

   The file contains a note indicating which file this is in the extract such as File 1 of 1 or File 2 of 4.
8. Close the file.
9. Select the CSV file to open and view its content.

   The file opens as an MS Excel spreadsheet and displays the extracted data as requested.

<u>Note</u>:

When you download an extract the time and date of transfer is recorded in the 'Transferred' column against the extract name.



22.7 To view Linked Extracts

In the records displayed in the Data Extracts screen, if any extract record is linked or other Supplementary and/or Error Extracts a Linked Extract icon will be displayed.

1. Click the **Linked Extracts** icon to the right of the extract to view linked extracts.

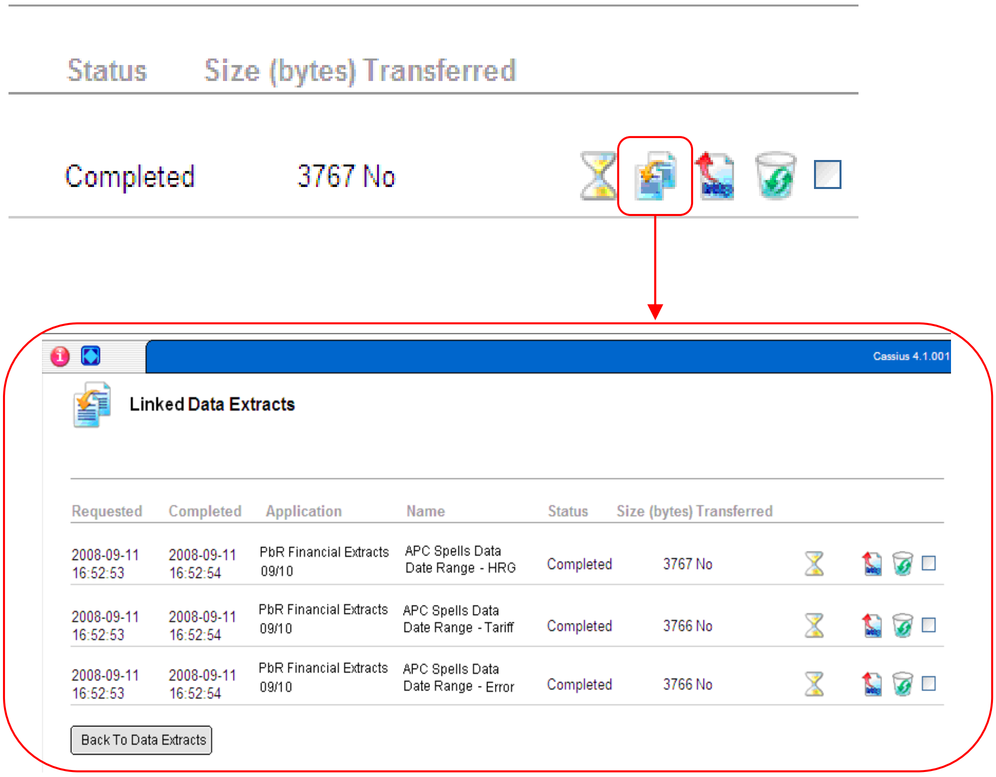


Figure 106 – Viewing Extracts – Linked Extracts

All linked extract records that were defined in the Configure Extracts dialog box are returned and displayed in a list.

Manipulate these records as required using the provided icons.

2. Click the **Back to Data Extracts** button to return to the main Data Extracts list.

23 The SUS Extract Mart

The SUS Extracts Mart contains two reports which offer additional functionality. The reports are;

- Data Change Report
- De-Encryption Report

23.1 The Data Change Report

The **Data Change Report** folder provides access to the **Tracking Report** which presents details of data that has changed and when it altered.

When you run the report the **Report Parameter Selection** dialog box opens for you to define the following options.

1. Select the **Data Change Report** folder.
2. Select the **Tracking Report**.
3. Set parameters for the report.

Organisation	Select the organisation(s) required.
Date Interchange From	Set the start date for report.
Date Interchange To	Set the end date for the report.
Provider	Select the provider organisation.
CDS Type	Select the Commission Data Set (CDS) type(s) as required.

4. Click the **OK** button to run the report.

   The report is displayed with the following information.

Organisation	Organisation that the data belongs to.
Interchange ID	ID of the interchange under which the data was submitted.
Date of Interchange Applied	Date that the interchange was processed by the system.
Provider	Organisation that supplied the interchange.
CDS Type	The CDS type into which the data record is categorised.
Records Count	The number of records that have changed during the period being reported on for the selected organisation(s).
DQR	A DQR button will be displayed if a data quality report exists for a particular record. Click the DQR button to drill-through to the DQR report.

23.2 The De-Encryption Report

The **De-Encryption Report** folder provides access to the **De-Encryption report** which supplies clear text versions of encrypted data for a specified record or group of records. Before running a **De-Encryption report** you will need to know the **Generated Record ID** of the record(s) to be de-encrypted.

Warning: RBAC and access to the De-Encrypted Report

With the defined role and RBAC activities you will be able to access the **De-encrypted Report**.

De-encryption of data is only available to users with appropriate access rights. Access to de-encrypted data assumes awareness of and adherence to Information Governance guidelines.

1. Select the **De-Encryption Report** folder.
2. Select the **De-Encryption Report**.

   The **Report Parameter Selection** dialog box opens for completion.
3. Enter the **Generated Record ID**, or **group of record IDs**, for which you want to view clear text versions of encrypted data.
4. Click the **OK** button to run the report.

   The report is displayed with the following information.

Generated Record ID
Address Lines 1-5
Patient Postcode
Patient Usual Address
Patient Date of Birth
Hospital Spell Provider Number
NHS Number
Patient Name Lines 1-5
Patient Preferred Name
Patient Surname
Date of Birth (Mother)
NHS Number (Mother)
Address Lines 1-5 (Mother)
Postcode (Mother)
Usual Address (Mother)

24 The Report Scheduler

The Schedules tab on the Navigation Bar allows you to access scheduler configuration options. You are able to:

- Configure the Scheduler for a one time only report
- View the current status of the Scheduler, manage the jobs in the scheduler.
- View the jobs currently in the scheduler.

24.1 To View the Scheduler Status

1. Click the **Schedules** tab to the left of the Navigation bar.
2. Click the **Scheduler Status** button.

   The following will be listed with additional information.

Active Threads	Displays the number of threads that are active.
Total Threads	Number of Threads that can be active.
Queue Size	Shows the number of jobs in the queue.
Maximum Queue Size	The maximum number of jobs that can be in the queue.
Queries Processed	Indicates the number of queries processed by the scheduler.
Average Time per Query	Indicates the average amount of time, in seconds, that the scheduler has taken to process each query.
Last Status Refreshed	Displays the date and time of the last refresh of the scheduler status.

24.1.1 To Refresh the Scheduler Status

1. Click the **Refresh Scheduler Statistics** button to the right of the Last Status Refresh row.

Note: This option was not implemented due to concerns regarding queue and space issues relating to high volumes of unnecessary and forgotten reports. The Scheduler Status tab will never contain any schedules to view.

24.2 To view the Schedule Job

1. Click the **Schedules** tab to the left of the Navigation bar.
2. Click the **Schedules** icon on the Navigation Bar.

   The following will be listed with additional information.

Schedule Name	Displays the name of the report that is scheduled to be run.
Frequency	Shows how often the schedule will run.
Next Due Date	Displays the date on which the report is due to be run.
Owner	This is the name of the person who created the report.
Scope	Whether the report can be viewed by all those with developer access or only by the report owner.
User/Group	The name of the User or Group to whom the report will be sent.
Status	Active, Failed, Completed.

24.3 To Create a New Schedule (one time only report)

1. Click the **Create New Schedule** button.
2. Enter a name in the **SCHEDULE NAME** field.
3. Click the **Select Report** button.
4. Using the navigation tree route to the report that you want to select.
5. Click the **OK** button.

   The **REPORT NAME** field will be automatically populated with the name of the report that you have just selected.
6. Click the **Set Context** button to set context parameters.
7. Click the **Run in background** radio button

   Or

   Click the **Normal priority** radio button to determine if the report is run in the fore/background.
8. Click the **Define Schedule** button to set the date, time and frequency that the report is to be run.
9. Click the  button, next to the **DATE** field.
10. Select the **date** and the **time** that the report is to be run.
11. Select ‘Once Only’ as the frequency of the report.
12. Click the **OK** button.
13. Click the **Add User** icon to add additional users to the distribution list.
14. Enter either the **user’s User ID** or **Caption** to perform a search for the additional user.
15. Click the **Go** button.
16. Click the **radio button** to the left of user name to add (from Search Results).
17. Click the **OK** button.
18. Add a **User Group** as required to the distribution list.

19. Add an **Interest Group** as required to the distribution list.
20. Click the **Save** button.

24.4 To amend a Scheduled Job

1. Click the **Maintain Scheduled Report/Settings** icon to the right of the row for the scheduled job that you want to amend.
2. Amend any or all of the information as outlined below.

Schedule Name	Shows the name of the job in the schedules page.
Report Name	The name of the report that is created by the scheduler.
User/System	Whether the schedule can be viewed in the schedules list by anyone or by the user who created it.
Schedule	The date, time and frequency for the report.
User and User/ Interest Groups	The names of the users, user groups and interest group that receive the report once it has been run.

3. Click the **Modify** button.

24.5 To Delete a Scheduled Job

You can delete a job that is currently running or is scheduled to run at a later date.

1. Click the **Delete** icon at the end of the row for the scheduled job that you want to delete.

24.5.1 To Delete more than one Scheduled Job

1. Click the **checkboxes** at the start of the rows for the scheduled jobs that you want to delete.
2. Click the **Delete Selected** button on the toolbar.

24.5.2 To Delete all Scheduled Jobs

1. Click the **Select All** button on the toolbar.
2. Click the **Delete Selected** button.

25 User Preferences

The features and functionality available to you is dependant upon the role that you have been assigned. However you can define several aspects of how the applications and reports look and perform.

There are two types of user preferences:

- Application preferences - Where you can specify settings that affect the way a particular application acts.
- Report settings - You can alter the way individual reports are displayed.

25.1 To alter Application Preferences

Application preferences are set up per application. The preferences that you specify will apply for the duration of your session and reset to default settings upon logging out.

1. Click the **Settings** tab to the left of Navigation Bar.

   Icons for each application that you can set preferences for will be displayed.

2. Click an **icon** to display the preferences for that application.

25.2 To alter NetPortal Application Preferences

1. Click the **NetPortal User Preferences** icon to display the "toolkit" application preferences regarding how SUS opens and provides warnings.

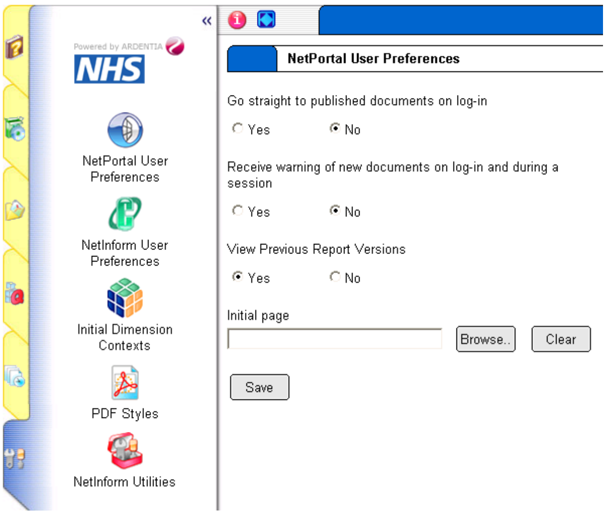


Figure 107 – NetPortal User Preferences

2. Click the **Yes** radio button for "Go straight to published documents on log-in" if you want to set your scheduled documents list as the page that is automatically displayed each time you start SUS.
3. Click the **Yes** radio button for "Receive warning of new documents on log-in and during a session" if you want a warning to be displayed when new documents are published to an interest group that you subscribe to.
4. Click the **Yes** radio button for "View Previous Report Versions" if you want to be able to view the version histories for reports.

5. Click the **Browse** button for “Initial page” to specify a particular report that will be displayed by default when you log in to SUS.
6. Navigate to the report that you want to make the default in the tree view (Left Hand Side).
7. Select the report that you want to use as the default (Right Hand Side).
8. Click the **OK** button.
9. Click the **Save** button next to the update prompt to save your changes.

25.3 To alter NetInform Application Preferences

1. Click the **NetInform User Preferences** icon to display the “toolkit” application preferences regarding how SUS reports are viewed and constructed.

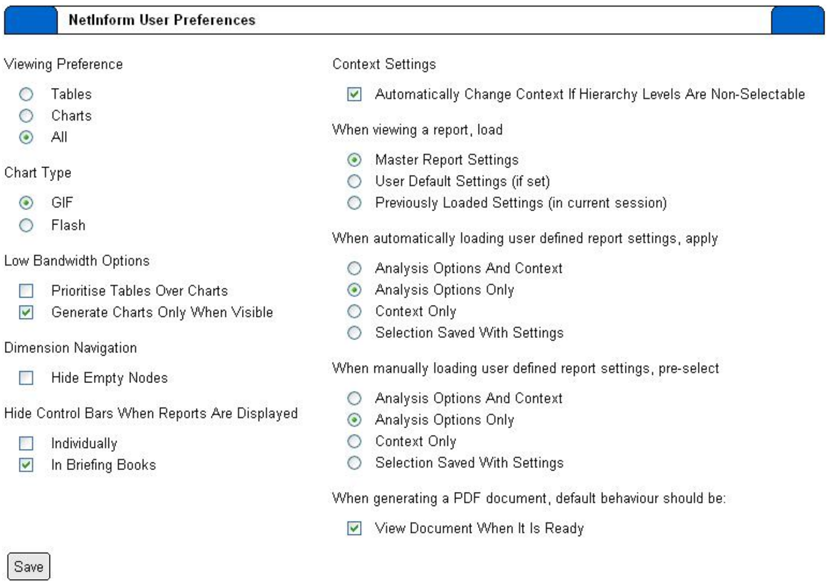


Figure 108 – NetInform User Preferences

2. Click the **radio buttons** or **checkboxes** for each section to set your own personal preferences.
3. Click **Save** to commit changes**.**

   The preferences that you specify will apply for the duration of the current session. Once you have logged out, the settings will revert to the original defaults.

25.4 To define PDF Template Styles

1. Click the **Settings** tab on the Navigation Bar.
2. Click the **PDF Styles** button.
3. Click the **Self** radio button to set the template to remain on your system.
4. Click the **Apply Selection** button.
5. Configure the **Page** options.
6. Click the **Header** tab and configure the **Header** options.
7. Click the **Footer** tab and configure **Footer** options.
8. Click the **Body** tab and configure the **Body** options.
9. Click the **Save** button.

26 Service Tracking and Data Quality Reporting

26.1 To view Submitted Interchanges

1. Click the **Applications** tab on the Navigation Bar.
2. Click the **Service Tracking Reports** folder.

   The contents of the **Service Tracking Reports** folder will be displayed in the Application Work Area.

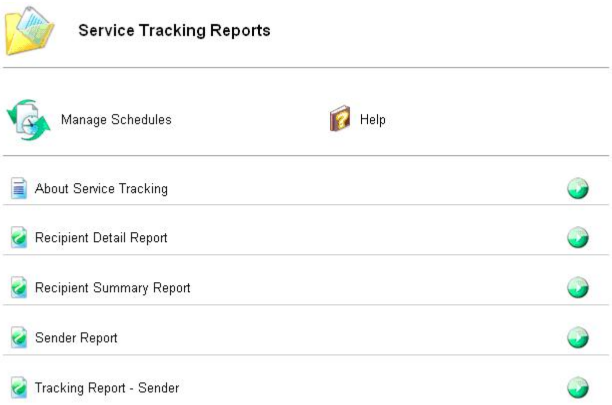


Figure 109 – Service Tracking Reports

3. Click the **Tracking Report - Sender** report.

   You will be presented with two drop down boxes requiring input.

Figure 110 – Tracking Report - Sender report settings

4. Click the **PERIOD** drop down field and select the time span you require.
5. Click the **SENDER ORGANISATION** drop down field and select the required organisation to analyse.
6. Click the **OK** button.

   A list of interchanges submitted by the selected organisation and for the chosen time period will be displayed.

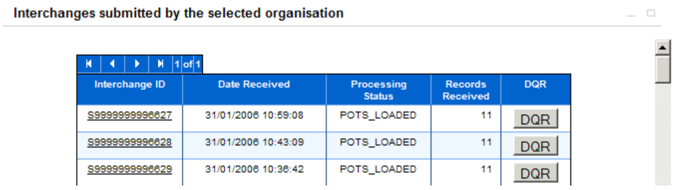


Figure 111 – Sample List of Interchanges

7. Click the **DQR** button to view the Data Quality Reports Home page for an interchange.

26.2 To view a Data Quality Report

1. Navigate to the **Submitted Interchange** to view its DQR Reports.
2. Click the **DQR** button.

   The **Data Quality Reports Home Page** is displayed.

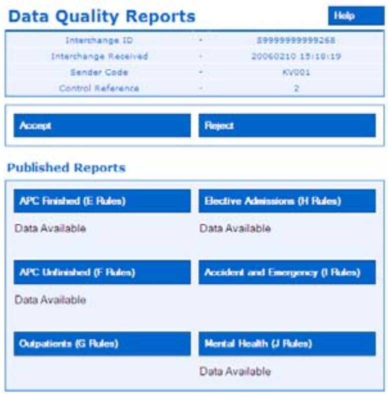


Figure 112 – Data Quality Home Page

3. Click a **Published Report** to view or click **Help** to view field validation definitions.

26.2.1 To select appropriate data view

The report will be displayed and you may have the ability to alter the reporting parameters.

4. Set any parameters if available.
5. Click the **Go** button.

26.2.2 To return to the DQR Home

6. Click the **Back** button.

   Or

   Click in to the **Application menu** and navigate away.

26.3 To Accept or Reject an Interchange

1. Click the **Applications** tab on the Navigation Bar.
2. Click the **Service Tracking Reports** folder.

   The contents of the **Service Tracking Reports** folder will be displayed in the Application Work Area.
3. Click the **Tracking Report - Sender** report.

   You will be presented with two drop down boxes requiring input.

4. Click the **PERIOD** drop down field and select the time span you require.

5. Click the **SENDER ORGANISATION** drop down field and select the required organisation to analyse.

   A list of interchanges submitted by the selected organisation and for the chosen time period will be displayed.

6. Click the **DQR** button to view the **Data Quality Reports Home** page for an interchange.

   Note: For Interchanges with a Processing Status of “Authorised” no **Accept** or **Reject** buttons are displayed on the **Data Quality Reports Home** Page.

7. Click the **Accept** button to progress the interchange.

   Or

   Click the **Reject** button to stop the progression of the interchange.

27 Payments by Results

The aim of Payment by Results (PbR) is to provide a transparent, rules-based system for paying trusts. It rewards efficiency, supports patient choice and diversity and encourages activity for sustainable waiting time reductions. Payment are linked to activity and adjusted for Casemix. Importantly, this system ensures a fair and consistent basis for hospital funding rather than being reliant principally on historic budgets and the negotiating skills of individual managers.

Note: PbR does NOT provide a contract monitoring service.

27.1 To understand how SUS supports PbR

The introduction of PbR marked a significant change for the NHS. SUS supports Department of Health (DH) PbR policy by applying the national rules and guidance to records relating to the care of patients (activity data).

Activity data for PbR in SUS comes from the Commissioning Data Sets (CDS) submissions from providers of NHS care. This data is used to derive PbR values such as PbR Spells and to assign Healthcare Resource Groups (HRG).

PbR applies to:

- Admitted Patient Care (APC)
- Outpatient Care (OP)
- Accident & Emergency (A&E) also known as Emergency Medicine (EM) in PbR policy.

Each record processed by SUS PbR is a “Finished Consultant Episode” (FCE) and in APC multiple FCEs can be combined for a single patient admission to form a spell.

27.1.1 Healthcare Resource Groups

Healthcare Resource Groups (HRGs) are standard groupings of clinically similar treatments which use common levels of healthcare resource. In their most basic form HRGs are groups of International Classification of Diseases - 10th Revision (ICD-10) diagnoses and Office of Population Censuses and Surveys (OPCS) procedure and intervention codes that have similar resource implications.

HRG v4 (which supersedes HRG v3.5 for APC and OP activity), has been developed and is maintained by the Casemix Service at the NHS Information Centre for Health and Social Care. The software and documentation relating to HRGs can be found on the NHS Information Centre website (http://www.ic.nhs.uk/casemix)

Prior to 2010-11, HRG3.5 was used as the currency for tariff application. HRG3.5 contained a concept of “Dominant HRG” which was the used to classify the spell as a whole. HRG4 replaced the concept of the dominant HRG with spell-level HRG which considers all the activity on all of the episodes within the spell.

Warning: 2010-11 Data will use 2010-11 PbR Processing Rules. It is not possible to run historic data against new rules.

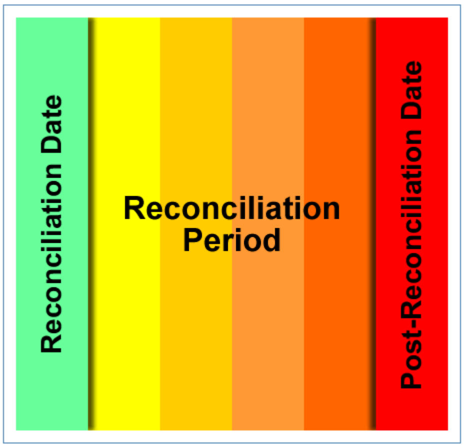
27.1.2 The Hospital Spell

The duration of a patient's hospital stay is a provider spell. An FCE is the time of continuous stay of a patient under the care of one Consultant. If the Consultant discharges a patient from their care to another Consultant this would represent another FCE.

- A (hospital) Provider Spell can comprise a number of FCEs.
- PbR Spells are a subset of Provider Spells with some of their component FCEs being excluded.
- There will be only one PbR Spell within any given Provider Spell.

27.1.3 Reconciliation and Post-Reconciliation Points, Reconciliation Period

Both providers and commissioners need to be able to view and check that the PbR data in SUS is using the most up-to-date and accurate CDS data. To meet this requirement the following are utilised:



- **Reconciliation Point**
  (previously "Flex")

  The date that the **Reconciliation Report** is produced following the final submission of the Commissioning Data Sets (CDS) for the month to SUS.
- **Post-Reconciliation Point**
  (previously "Freeze")

  The date that the **Post-Reconciliation Report** is produced following the final submission of changes of CDS data for the month.
- **Reconciliation Period**
  The period between the **Reconciliation Point** and **Post-Reconciliation Submission** dates (approx 3 weeks). During this time data can be amended and resubmitted to allow providers and commissioners to agree on the activity that will qualify for payment.

27.2 To locate the extracts on PbR data

PbR Extracts are available from the **Applications** tab within which will be located:

- **2006/2007 PbR** folder for payments based on HRG v3.5
- **2008/2009 PbR** folder for payments based on HRG v3.5
- **2009/2010 PbR** folder for payments based on HRG4 (HRG v3.2 for A&E)
- **2010/2011 PbR** folder for payments based on HRG4 (HRG v3.2 for A&E)
- **2011/2012 PbR** folder for payments based on HRG4

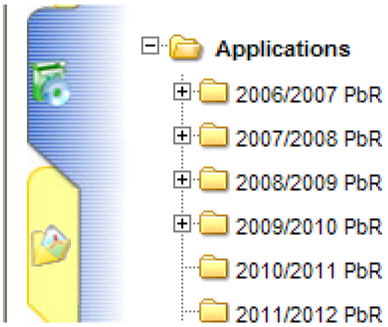


Figure 113 – Applications tab - Sample PbR folders

There are a variety of extracts available within the SUS Toolkit. SUS PbR users will have access to PbR extracts based on their organisation and User Role Profile activities (this information is taken from their Smartcard when they log into SUS).

To enable providers to improve the quality of their submitted data, SUS produces a range of error extracts which can be selected from the Additional Extracts Tab when creating the main extract (see section 22.1). Before the post-reconciliation date, it is vital that each CDS record is complete and accurate. When an FCE is processed by the SUS HRG Grouper, the appropriate HRG is assigned. An undefined HRG (UZ01Z) will be derived if the required information is incorrectly invalid for grouping. As UZ01Z has a tariff of £0, no income will be generated for this HRG. Organisations with high levels of UZ01Z HRGs will find that there are financial implications.

The financial position after the Post-Reconciliation date for the period may be an important consideration to ensure that the provider is being funded appropriately.

It is possible to produce an **Extract** to identify the following:

- Position at Reconciliation date
- Position at Post-Reconciliation date
- Changes between Reconciliation and Post-Reconciliation date
- Changes after Post-Reconciliation date
- Current position (at any point in time)
- Date Range

For further information refer to section 22.1.

27.3 To understand how Reconciliation Dates work

SUS gives commissioners and providers the opportunity to audit and reconcile their financial position based on the PbR reports prior to the financial period being closed.

Both providers and commissioners need to be able to view the PbR data and identify any PbR exclusions. To meet this requirement and enable providers and commissioners discuss and reconcile PbR activity, SUS PbR produces extracts at:

- **Reconciliation Point** (previously “Flex”)
- **Post-Reconciliation Point**

Reconciliation and **Post-Reconciliation** dates are set annually by the Department of Health.

The following illustrates the positioning of the various **PbR Reconciliation Dates**.

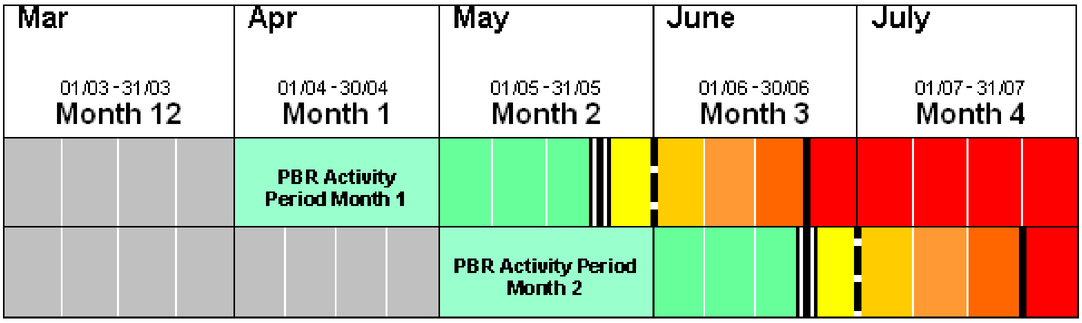
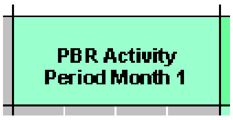
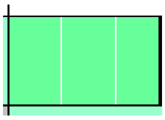


Figure 114 – Illustration of how Reconciliation Dates work



Activity Month
This is the calendar month in which the PbR activity has taken place



Submission Period
This period is from month end to the Reconciliation Submission Date.

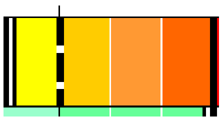
Reconciliation Submission Date
Also known as the **"Reconciliation Inclusion Date"** it is the 21st to 24th of the month (varies). This is the last date that data can be submitted to be included in the Reconciliation Report.

The Standard NHS Contract for Acute Services states:
"6.14 The NHS Operating Framework 2009/10 confirmed that providers should focus on improving the quality of their data submission through SUS so that it becomes the standard repository for activity and performance monitoring, reconciliation and payments. Providers should deliver initially coded datasets on a weekly basis from April 2009. This continues to be the requirement."

Reconciliation Point
This is the date when the Reconciliation Report (extract) is issued.

The Standard NHS Contract for Acute Services defines:
"First reconciliation point – means date when the PbR activity is available to the commissioner to facilitate reconciliation between provider and commissioner."

Reconciliation Period
This is the period during which commissioners and providers discuss and reconcile the previous months PbR activity.

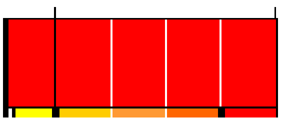


It starts at the Reconciliation Point and ends with the Post-Reconciliation Submission (inclusion) Date.

Post-Reconciliation Submission Date
Also known as the **"Post-Reconciliation Inclusion Date"** it is the 21st to 24th of the next month (varies).

This is the last date that data can be submitted to be included in the Post-Reconciliation Report.

Red Area
After the Post-Reconciliation Point, new or revised data can be submitted to SUS, and will be reflected in the **current** SUS-PbR view, but the Reconciliation data and the Post-Reconciliation data will not change.



27.4 An example of a PbR calculation

PbR is linked to Casemix adjusted activity. When calculating the HRG on which the actual payment is based, there needs to be an understanding of the steps involved in the patient's care.

(1) The patient is unwell and goes to find out what is wrong.

(2) The patient is referred for investigation and treatment for example by their GP to an NHS Hospital Trust.

(3) The patient undergoes treatment in the Trust.

(4) Patient information may be recorded on a variety of provider Patient Administration Systems. Data can be extracted from these to feed into the CDS.

(5) The CDS data is submitted to SUS and relevant information is fed into SUS PbR.

(6) The data is processed within SUS PbR so that the HRGs are generated and PbR rules applied.

Using the following example you can see how the HRG and PbR tariff is calculated for a PbR Spell with a single FCE.

"*Joe is 74 years old and suffers from diabetes; he also needs to receive periodic (planned) treatment for renal disease. There are no other complications to increase Joe's length of stay in hospital or for additional FCEs within this Hospital Provider Spell*."

For further examples of PbR calculations please refer and look at the SUS eLearning modules as these cover the following scenarios:

- A patient with a single FCE whose length of stay in hospital is within the normal range for that HRG.
- A patient with a single FCE whose length of stay in hospital is outside the normal range for that HRG.
- A patient with a number of FCEs whose length of stay in hospital is outside the normal range for that HRG.
- A patient who visits A&E then is discharged following investigation.
- A patient who attends an outpatient clinic following a surgical procedure.

The renal treatment that Joe requires is described as **General Renal Disorders 19 years and over with intermediate cc** (over 19 years old and with intermediate complications or co-morbidities).

This has the **HRG code** of **LA09B**.

Planned care

Unplanned care e.g. emergency

HRG code	HRG name	Elective		Non-Elective		Per day long stay payment (for days exceeding trimpoint) (£)
		Combined Daycase/ Elective tariff (£)	Elective long stay trimpoint (days)	Non-elective spell tariff (£)	Non-elective long stay trimpoint (days)	
LA09A	General Renal Disorders 19 years and over with Major CC	3,470	36	3,344	33	214
LA09B	General Renal Disorders 19 years and over with Intermediate CC	1,938	10	1,831	13	214
LA09C	General Renal Disorders 19 years and over without CC	721	7	1,351	10	214

The national elective long stay trimpoint for the HRG

The national non-elective long stay trimpoint for the HRG

The tariff for elective spell for the HRG

The tariff for non-elective spell for the HRG

The tariff for each extra day beyond the long stay trimpoint. Payment standardised at chapter level

A calculation needs to work out the tariff for the spell HRG for PbR that reflects the care given to Joe.

The formula to calculate the PbR Spell tariff is:

National elective tariff for the HRG + **Additional payment for any extra days (daily rate x number of extra days)**

To do this the tariff and duration of HRG code **LA09B** within the HRG Tariff table is looked up and added to any additional tariff for any extra days and with Joe's case there are no extra days.

So the calculation is

•	HRG Tariff of £1174	£1,938
	Plus	+
•	Long Stay Payment of £205 x 0 days	£0
	Equals	_______
•	Giving a total of £1174	£1,938

For further examples of PbR calculations please refer and look at the SUS eLearning modules.

27.4.1 Market Forces Factor

The Market Forces Factor (MFF) is an index of the relative differences in unavoidable costs faced by NHS organisations.

The unavoidable costs included in the MFF relate to:

- Staff
- Land
- Buildings

The MFF index used for payment purposes in PbR is known as the MFF Payment Index and it has a minimum value of 1.0. Each NHS provider has its own MFF value.

The national tariff is calculated net of the unavoidable cost differences estimated by the MFF. Providers receive payment for activity at the national tariff plus a separate payment to compensate them for the unavoidable cost differences they face, based on their MFF payment value. In total, income per HRG to a provider is the national tariff price multiplied by their MFF payment value.

2011-12 the MFF payment associated with activity within the scope of PbR for Mandatory tariff will be paid directly by the responsible commissioner (for both contract and non-contract activity) and is capped at 2% as in previous years. Organisations merging on 1 April 2011 will have a new MFF payment index from this date. Those that merge during the financial year will have a new MFF from 1 April 2012.

For further information about the MFF, please see the ‘MFF and PbR’ technical guidance issued on the PbR website at www.dh.gov.uk/pbr

For example:

- **HomeCounty Hospital NHS Trust** has a **MFF** of **1.096131**

- A patient of **Anytown PCT** has undergone an elective daycase procedure at **HomeCounty Hospital** that has produced an HRG as follows:

  CZ01Y Minor Mouth Procedures 19 years and over without CC, **which has a Combined Daycase/Elective tariff of £436**

- **Anytown PCT** will have to pay **HomeCounty Hospital**
- **Combined Daycase/Elective tariff** x **MFF** = **Total**
  £436 x **1.096131** = **£478**

SUS calculates the tariff value in whole pounds in accordance with DH policy.

The National Tariff value, the MFF applicable and the tariff including MFF will all be shown in SUS-PbR extracts.

27.5 Tariff Structures - Local Pricing and Non-Mandatory tariffs

There are three principle pricing structures which providers and commissioners work to:

- Mandatory tariffs
- Non-mandatory tariffs
- Local tariffs

SUS PbR functionality allows some local tariff arrangements to optionally be applied within SUS PbR for APC, OP and A&E where no mandatory tariff exists. This is termed ‘local pricing’.

The aim of this is to improve the coverage of the SUS PbR system across acute services, reduce the reliance of NHS organisations on local systems and ensure that outputs from SUS PbR are as useful as possible to local NHS organisations.

27.5.1 Mandatory tariffs

National Mandatory Tariffs are the tariffs published by the Department of Health. HRG v4 is the currency underpinning the PbR tariff in 2011/12. Not all of the service areas covered by the HRG v4 design will have a National Tariff in 2011/12. This is due to a number of reasons, such as the quality of costing and activity data available which could underpin a National Tariff.

27.5.2 Non-mandatory tariffs

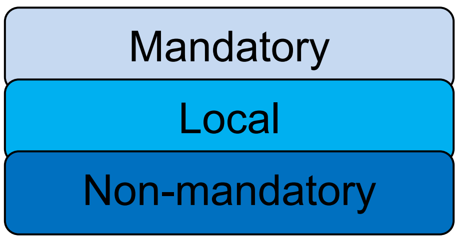
A limited number of non-mandatory prices for 2011/12 are published to support the achievement of specific policy aims. These prices are non-mandatory in 2011/12 and so can be varied/negotiated to reflect local circumstances.

27.5.3 Local tariffs

Local tariffs are arrangements between a provider and commissioner about activity that falls outside of the scope of the National Mandatory Tariffs.

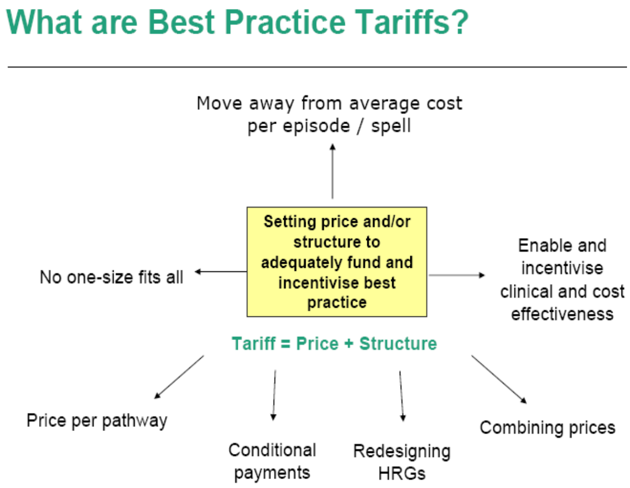
Previously, functionality was introduced which allows local prices that have been agreed between providers and commissioners to be applied within SUS PbR.

In SUS PbR, the principle is that a hierarchy of the pricing structures will be applied with a mandatory price taking precedence over both local and non-mandatory whilst a local price will take precedence over a non-mandatory price (as illustrated).



27.6 Best Practice Tariffs

In 2010-11 the Department of Health provided Best Practice Tariffs (BPTs) in four high volume areas, with the aim of reimbursing providers for improving the quality of care.



Warning: This user guide and e-learning material should be read alongside the PbR guidance on best practice tariffs. Please see section 6 of the PbR guidance available at www.dh.gov.uk/pbr

The four high-volume areas listed below were all characterised by significant unexplained variation in practice and clear consensus of what clinical best practice constituted.

- Cataracts – with payment for best practice based on a single price covering the entire patient pathway in secondary care
- Fragility hip fracture and acute stroke care – with payment for best practice paying spells at base tariff with an additional payment contingent on complying with best practice
- Gall bladder removal (cholecystectomy) – with payment for best practice paid to Incentivise cholecystectomy procedures in a daycase setting.

The Best Practice Tariff package for 2011-12 is a combination of new service areas and further development of the existing Best Practice Tariff logic and includes;

- 12 additional procedures across 5 sub-specialties, breast surgery, gynaecology, orthopaedics, urology and hernia repair, extending the daycase model.
- Interventional Radiology – an HRG based Best Practice Tariff to encourage the provision of innovative procedures by making them more visible in the payment system.
- Total primary hip and knee replacements - introducing a Best Value Tariff to incentives in the clinical pathways of patients undergoing these procedures.
- Transient Ischaemic Attack (or mini-stroke) – a tariff for timely and effective outpatient systems for treating patients with TIA to complement the existing acute stroke Best Practice tariff.

27.7 Outpatient Tariff Application

HRG4 allows the capture of procedures in an outpatient setting. For 2011-12 there are now 53 mandatory Outpatient procedure HRG tariffs covering over 5,000 procedures nationally. Available at: http://www.dh.gov.uk/pbr

All other outpatient procedure HRGs (that are not on this list) are reimbursed using mandatory outpatient attendance tariffs (where relevant). Where this is the case, SUS PbR will create both the outpatient procedure HRG and an additional SUS derived HRG reflecting the outpatient attendance HRG.

In 2011-12 the DH have increased the number mandatory outpatient procedure HRG tariffs for high volume procedures undertaken in an outpatient setting. Where an outpatient procedure HRG is not mandatory, the costs and activity have been rebundled into the relevant outpatient attendance Treatment Function Codes (TFCs). This is described in the Step-by-step guide to the calculation of the 2011-12 tariff.

Where patient data has been grouped to a non-admitted attendance HRG (HRG4 sub-chapter WF), SUS PbR determines whether the TFC has a mandatory tariff and applies the appropriate outpatient attendance tariff. If the TFC does not have a mandatory tariff, the price is for local negotiation between commissioners and providers

Where patient data has been grouped to an outpatient procedure HRG (i.e. not from HRG4 sub-chapter WF), SUS PbR determines whether the HRG has a mandatory outpatient procedure HRG tariff and applies it. Where it does not, SUS PbR determines whether the TFC has a relevant mandatory outpatient attendance tariff (based on HRG4 sub-chapter WF).

In 2011-12, the DH are introducing a distinction between HRGs that are excluded across all settings, and HRGs that are excluded for admitted patient care but where the activity may still generate an outpatient attendance tariff. For example, the HRG for lung volume studies (DZ45Z) is excluded from admitted patient care and does not have an outpatient procedure tariff, but may generate an outpatient attendance TFC tariff.

The list of mandatory outpatient procedure HRG tariffs were chosen initially because they have no fewer than 5,000 procedures nationally and no fewer than 20 providers submitting data in 2008-09 reference costs, and then amended following clinical advice.

The outpatient based procedure tariff is always paid instead of the TFC based attendance tariff. If more than one of these procedures is undertaken in a single outpatient attendance, the HRG will be based on the same logic as used in admitted patient care (i.e. based on the procedure that is ranked highest in the procedure hierarchy), and only one outpatient procedure HRG tariff will be chargeable.

27.7.1 Example - Mandatory tariff in 2011-12

Helen attends an outpatient appointment for a patch test to identify and confirm what is causing her skin allergy. Patch tests are one of the outpatient procedures for which there is a mandatory tariff in 2011-12. This generates the outpatient procedure HRG of JC09Z (Patch Tests) which attracts a tariff of £102.

28 Appendix One - Quick Reference Guides

Quick Reference Guides are provided for you to use as handy, compact reference tools. Use as individual pages within this User Guide or divide out and keep separate on your desk.

The Quick Reference Guides enclosed relate to using the Spine Portal and maintenance of your Smartcard:

- Self Certification and Passcodes Renewal
- Fallback Authentication

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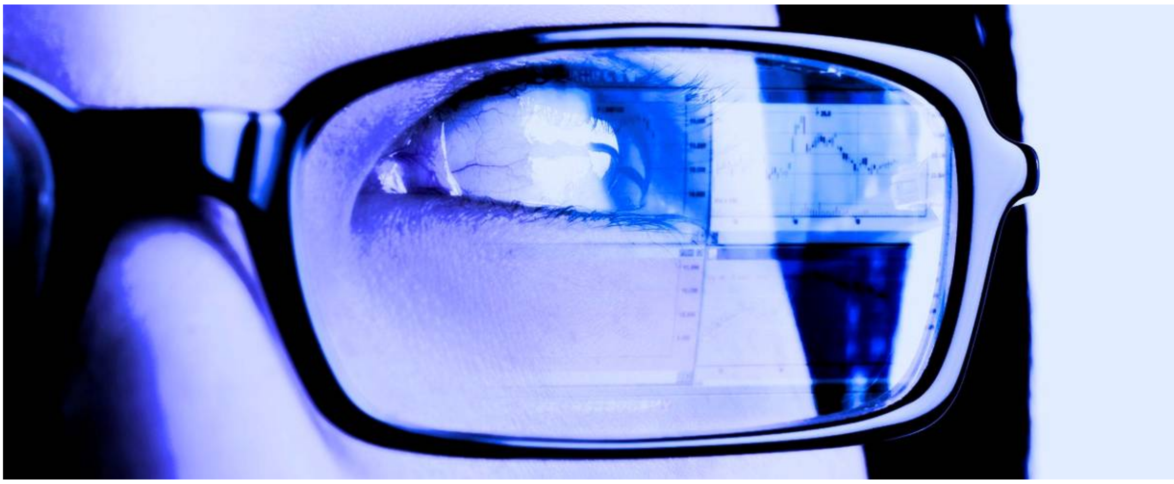
Self Certification and Passcodes Renewal



Smartcard Certificate Renewal

Two certificates were written to your Smartcard when it was created. These certificates need to be renewed every two years.

As with your Passcodes, these certificates are checked every time you log on to the Spine Portal. If your certificates are about to expire and fall within the notification period, the screen will display a message stating that your Smartcard is going to expire and offers you the option to renew it now (Yes) or later (No). If you choose to renew later, you are returned to the Spine Portal home page and can continue working within the Spine applications.

If you select Yes you will be taken to the Self Service Portal and the home page is displayed.

Warning: Once the Certificates have expired, you have to contact your local RA personnel who will issue you a new Smartcard.
You are able to self renew your certificates twice, after that the system will advise you to contact your local RA personnel.

To Renew your Smartcard

You have logged on to the Spine Portal and have been requested to renew your Smartcard.

1. Click **Yes** when prompted to renew your Smartcard.

   The Self Service Portal opens.
2. Select the **Renew Smartcard** tab.

   You will be presented with **Update My Card** workflow.

3. Enter your Smartcard Passcode to confirm your identity and the first certificate update.
4. Click the **OK** button.

NHS Care Records Service

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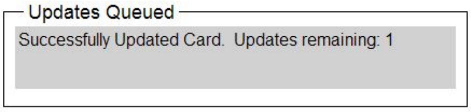
The screen will display a message stating that it is "Applying update 1 of 2".

Creating Card and **Writing Certificates** warnings appear one after another.

You are advised that the card is being updated and please wait. When the first certificate has been renewed a confirmation is returned.



The system will renew the second certificate in the same way and display the **Update My Card operation completed** message.

5. Click the **Continue** button to confirm the update.

   You will then be advised to close your browser and login again.

<u>Warning</u>: If the second certificate is not renewed you could have problems accessing the NHS Care Records Service.

PASSCODE(S) RENEWAL

When you were registered to use the Spine, you were requested to enter three Passcodes:

- **Account Recovery Passcode**. This is used to authenticate a user when requesting assistance from either the RA personnel or the Spine Helpdesk.
- **Verification Passcode**. This is used to identify a user when requesting assistance from the Choose and Book Helpdesk.
- **Smartcard Passcode**. The combination of Smartcard and Passcode ensures that access to the NHS Care Records Service (NHS CRS) is controlled and secure.

These Passcodes are automatically checked every time you log on to the Spine Portal. After a period of time you will be notified to renew one, two or all three of the Passcodes.

If when you log on to the Spine, one of your Passcodes falls within the thirty days notification period, the screen will display a message giving you the option to renew it now (Yes) or later (No). If you choose to renew later, you are returned to the Spine Portal home page and can continue working within the Spine applications.

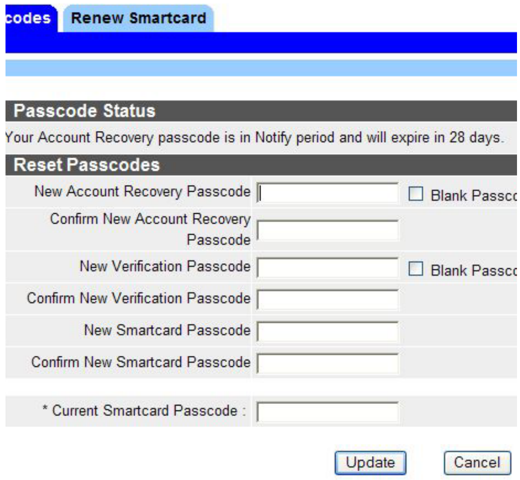
To Renew your Passcode(s)

You have logged on to the Spine Portal and have been requested to renew your Passcode(s).

1. Click **Yes** when prompted to renew your Passcode(s).

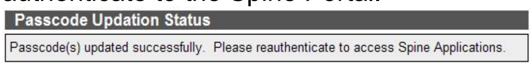
   The Self Service Portal opens.
2. Select the **Manage Passcodes** tab.

The Passcode Status panel will state which Passcodes require renewal.



3. Enter and reconfirm new Passcodes against those that require updating.
4. Enter your current Smartcard Passcode against the **CURRENT SMARTCARD PASSCODE** field to confirm your identity.
5. Click the **Update** button to complete.

   A message will be displayed on screen saying "Your Smartcard is being verified. Please wait….." Finally a confirmation message is displayed and will ask you to authenticate to the Spine Portal.



<u>Warning</u>: You can choose the Blank Password checkbox for both the Account Recovery and Verification Passcodes. If you make this choice you cannot use their associated service.

A "blank" Account Recovery Passcode means that Fallback Authentication is not possible and the Verification Passcode being "blank" impacts your Choose and Book assistance.

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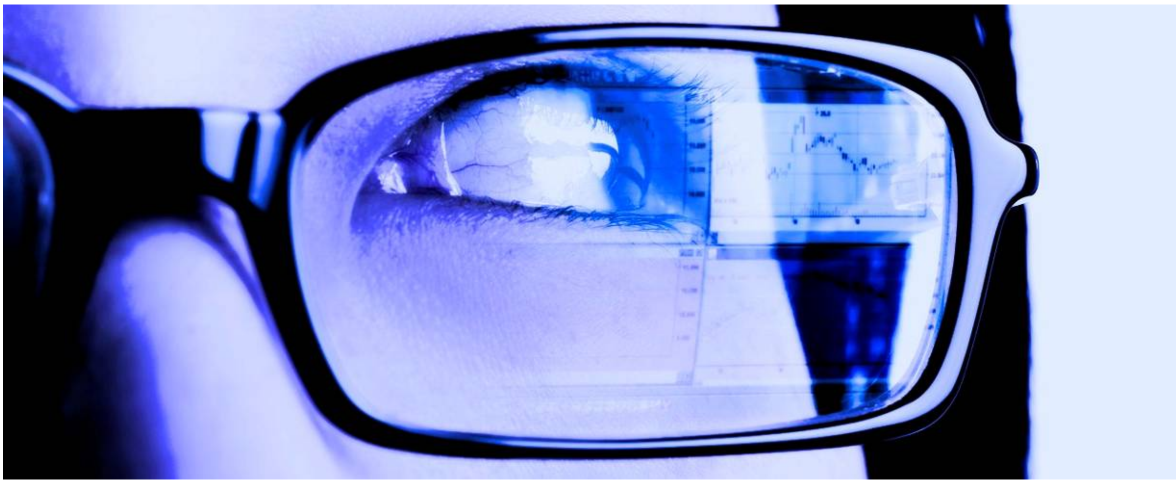
Fallback Authentication



INTRODUCTION

A Fallback Smartcard is a temporary card held by local custodians and lent to users when their Smartcard is not available. Before a Fallback Smartcard can be used it has to be assigned to the user. This is done by accessing the Smartcard Service Centre (SCSC) which is a secure web based application.

For security reasons, the system will generate a One Time Passcode and send it either by email or SMS (text).

The Fallback Smartcard will take on all the attributes of your original card and the system will continue to audit your usage of the Spine. If the temporary card is because your Smartcard is lost, damaged or stolen, you will need to contact your local RA personnel for a new Smartcard. If you have forgotten your Smartcard, the system will suspend your original card until the Fallback Smartcard expires or you return it.

The Smartcard Service Centre has three major functions:

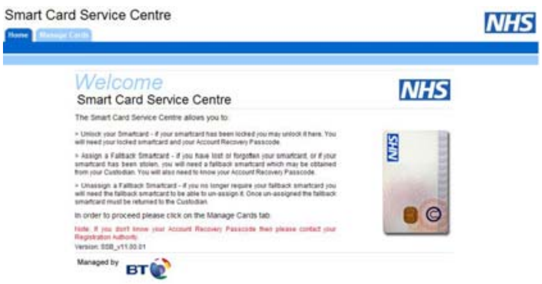
- Assigning a Fallback Smartcard.
- Returning (un-assigning) a Fallback Smartcard.
- Unlocking a Smartcard.

Warning: Fallback authentication will only be available to users who have set an Account Recovery Passcode.

ASSIGN A FALLBACK SMARTCARD

Once you have visited your local custodian and collected a Fallback Smartcard and URL (web) address complete the following steps.

1. Launch the provided URL in a browser window.



2. Insert the Fallback Smartcard into the card reader.

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Please insert your NHS Smartcard into the card reader.
Note: If you are prompted to enter your passcode when you insert your Smartcard into the card reader please select the No option.

3. Click on the **Manage Cards** tab.

Enter your authentication details	
The Smartcard certificate is valid until Sat Oct 17 15:12:05 GMT 2009	
*User's Unique Identifier :	
*Family Name :	
*Account Recovery Passcode :	

OK Cancel

4. Enter your **UUID** in the **USER'S UNIQUE IDENTIFIER** field.
5. Enter your **surname** in the **FAMILY NAME** field.
6. Enter your **Account Recovery Passcode** where prompted.
7. Click the **OK** button.

   You are then asked how you would like to receive your time limited “One Time Passcode”.

Select One Time Passcode delivery channel
Email (r.bell@nhs.net)
SMS (07702 12345)

OK Cancel

8. Select either the Email or SMS radio button.
9. Click the **OK** button.
10. Enter the received One Time Passcode in the **ONE TIME PASSCODE** field.

Enter the received One Time Passcode	
*One Time Passcode :	

OK Cancel

11. Select an appropriate choice from the **Reason for Needing Fallback Smartcard**.

    You can choose Forgotten, Lost, Stolen or Broken card.

Warning: If the card has been Lost or Stolen you must inform your RA Personnel who will block the Smartcard.

12. Click the **OK** button.

    The fallback card will be identified.
13. Click the **OK** button to continue.
14. Enter a new Passcode in the **NEW PASSCODE** field.
15. Enter the Passcode again in the **CONFIRM PASSCODE** field.
16. Click the **Unlock** button.

    An Unlock Card operation completed message will be displayed.
17. Click the **Continue** button.

    Finally a confirmation message is displayed to confirm you have successfully assigned a Fallback Smartcard and when it is valid until.
18. Click the **OK** button.

UNASSIGN A FALLBACK SMARTCARD

1. Launch the provided URL in a browser window.
2. Insert the locked Smartcard into the card reader.
3. Click on the **Manage Cards** tab.
4. Click the **OK** button to unassign the Smartcard.
5. Click the **OK** button to recognise that you need to hand the card back to its Custodian.

UNLOCK YOUR SMARTCARD

1. Launch the provided URL in a browser window.
2. Insert the locked Smartcard into the card reader.
3. Click on the **Manage Cards** tab.
4. Enter your **UUID** in the **USER'S UNIQUE IDENTIFIER** field.
5. Enter your **surname** in the **FAMILY NAME** field.
6. Enter your **Account Recovery Passcode** where prompted.
7. Click the **OK** button.

   You are then asked how you would like to receive your time limited “One Time Passcode”.
8. Select either the Email or SMS radio button.
9. Click the **OK** button.
10. Enter the received One Time Passcode in the **ONE TIME PASSCODE** field.
11. Click the **Unlock Card** button.

    Your card will be identified.
12. Click the **OK** button.
13. Enter a new Passcode in the **NEW PASSCODE** field.
14. Enter the Passcode again in the **CONFIRM PASSCODE** field.
15. Click the **Unlock** button.

    An Unlock Card operation completed message will be displayed.
16. Click the **Continue** button.
17. Click the **OK** button.

Notes